Longines
B3-A10
SERVICE GUIDE

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Revision History

Please refer to the table below for the updates made on this service guide.

Date	Chapter	Update

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General Information

This Service Guide provides you with all technical information relating to the basic configuration for Acer's global product offering. To better fit local market requirement and enhance product competitiveness, your regional office may have decided to extend the functionality of a machine (e.g. add-on card, modem, or extra memory capabilities). These localized features are not covered in this generic service guide. In such cases, contact your regional offices or the responsible personnel/channel to provide you with further technical details.

When ordering FRU parts:

Check the most up-to-date information available on your regional web or channel. If, for whatever reason, a part number change is made, it may not be noted in this printed service guide.

For Acer-authorized service providers:

Your Acer office may have a different part number code than those given in the FRU list of this printed service guide. The list provided by your regional Acer office must be used to order FRU parts for repair and service of customer machines.

CHAPTER 1

Product Features and Hardware Specifications

Product Features and Hardware Specifications

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Product Features and Hardware Specifications

Features

Following is a summary of the tablet's main specifications:

Category		Description	Footnote
Operating System	**1**	Android™ 5.1 (Lollipop)	
Dimensions and weight	**2**	**Dimensions** • 172 (W) x 245 (D) x 9.2/9.2 (H) mm (6.77 x 9.65 x 0.36/0.36 inches) **Weight** 0.51 kg (1.12 lbs.) with 2-cell battery pack	
Color options		Midnight Black Essential White	
CPU and chipset	**1**	**MTK MT8151** octa-core Cortex A7 1.7 GHz processor	
Memory	**1, 3**	DDR3L memory support • DDR3L 1 GB on-board system memory	4.5
Display	**1**	10.1" display with IPS (In-Plane Switching) technology, HD 1280 x 800, high-brightness LED-backlit TFT LCD with integrated multi-touch. Supporting 10 finger touch 16:10 aspect ratio Wide viewing angle Super-slim design Mercury free, environment friendly	6
Storage		• 32 GB eMMC • 16 GB eMMC **Card reader** • Supporting: microSD™ Card(SDXC)	7 7
Webcam	**1**	**Video conferencing** Rear webcam with: • 2560 x 1920 resolution Front webcam with: • 640 x 480 resolution	
Wireless and networking	**1**	**WLAN** • 802.11b/g/n wireless LAN **WPAN** • Bluetooth® 4.0 **Location services** • aGPS support	**8.9** **1**
Power adapter and battery	**1**	**Power adapter** 2-pin 10 W AC adapter • 75.3 (W) x 45 (D) x 33.8(H) mm • 75 g without DC cable • AC power plug is interchangeable	

	2-pin 10 W AC adapter: • 43 (W) x 43 (D) x 27.5 (H) mm • 57 g, without DC cable • Fixed AC pins **Battery** • 20.29 Wh 5340 mAh 3.8 V 2-cell Li-ion battery (for models with HD Panel) Battery life up to 9 hours	
Input and control	**Control Keys** • Power button • Volume up, volume down	
Input and output	• microSD card up to 128 GB (SDHC compatible, exFAT compatible) • 3.5 mm headphone/speaker jack, supporting headsets with built-in microphone • USB 1x Micro USB 2.0 Type B, supports OTG	
Sensors	• Accelerometer (G-sensor)	
System compliance	• RoHS compliance • WEEE compliance • SMT green process	
Options and accessories	• Micro USB 2.0 to USB 2.0 cable • 2-pin 10 W AC adapter	
Warranty	One-year International Travelers Warranty (ITW)	
Others	**Android SW** • Iconia Suite including EZ Tasking, EZ Note, EZ Snap, EZ WakeUp, and EZ Gadget • Acer Portal(Acer BYOC™) • Iconia Suite including EZ Note, EZ Snap, EZ WakeUp, and EZ Gadget	
1. Specifications vary depending on model. 2. Weight may vary depending on product configuration, vendor components, manufacturing variability, and selected options. 3. Shared system memory may be allocated to support graphics, depending on system memory size and other factors. Actual system memory available to the operating system will be reduced by any memory used by the graphics solution and resources required by the operating environment. 4. Memory speed may vary, depending on the CPU, chipset or memory fitted. 5. A 64-bit operating system is required to enjoy the ultimate performance of 4 GB or higher memory. 6. All brands and product names mentioned herein include trademarks of their respective companies and are used solely to describe or identify the products. 7. 1 GB is 1 billion bytes. Actual formatted capacity is less and may vary depending on preloaded materials and operating environment. Acer Recovery Management uses a portion of the stated hard disk capacity as dedicated backup space. 8. Actual throughput may vary depending on network conditions and environmental factors such as network traffic or overhead, building construction and access point		

settings.

9. Subject to availability.

In a continuing effort to improve the quality of our products, information in this document is subject to change without notice. Images shown are only representations of some of the configurations available for this model. Availability may vary depending on region.

As a phenomenon known to thin-film transistors (TFTs), liquid crystal displays (LCDs) commonly exhibit a small number of
discoloration dots, as so-called "non-conforming pixels." This phenomenon is a limitation of TFT LCD technology, not a product
defect, and as such is not covered by Acer's warranty.

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About Acer

Established in 1976, Acer is a *hardware + software + services* company dedicated to the research, design, marketing, sale, and
support of innovative products that enhance people's lives. Acer's product offerings include PCs, displays, projectors, servers,
tablets, smartphones, and wearables. The company is also developing cloud solutions to bring together the Internet of Things. Acer employs 7,000 people and ranks No. 4 for total PCs globally (IDC 2014). Revenues for 2014 reached US$10.39 billion. Please visit www.acer.com for more information.

Tablet Tour

Six View

Front View

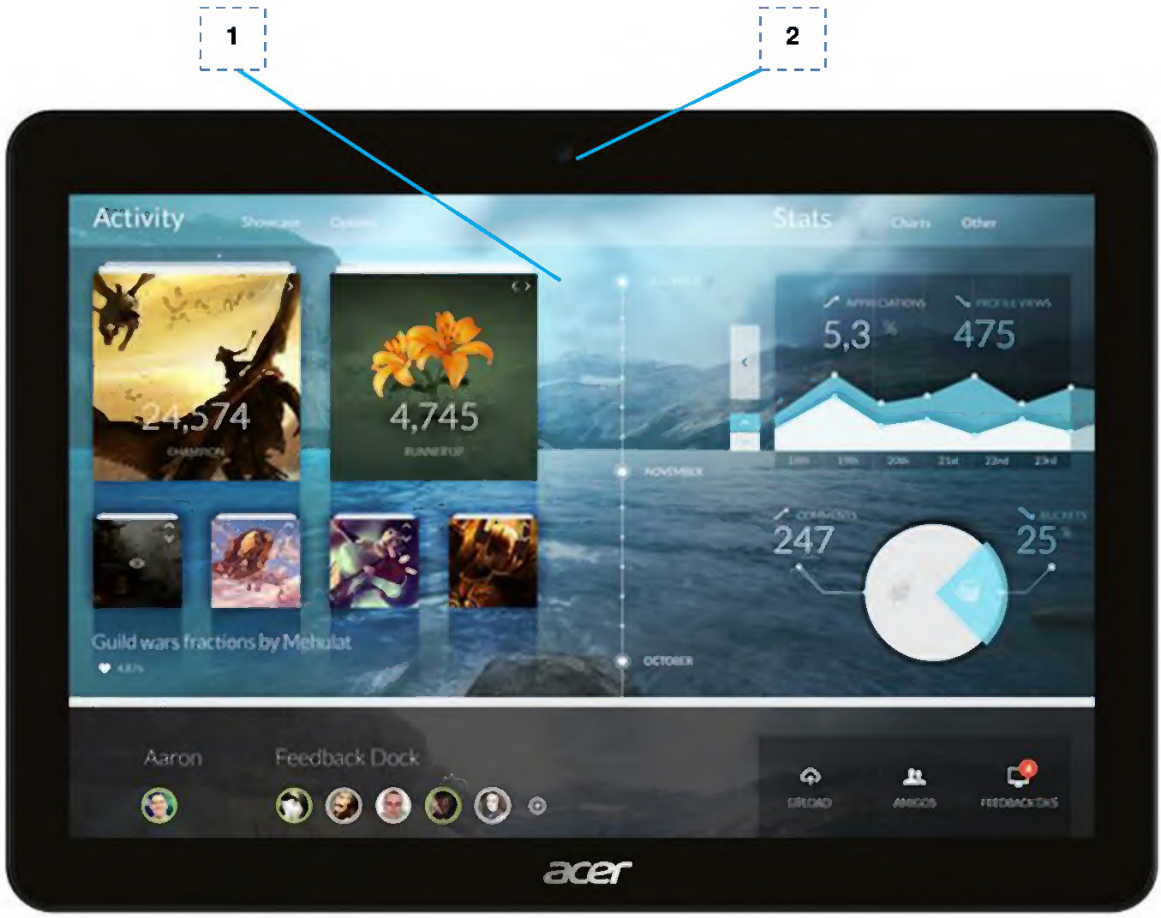


Figure 1.1 Front View

#	Item	Description
1	Touch Screen	TP-10.1 inch
2	Front Camera	Front Camera-5*5*2.95_30W

Rear View

Figure 1.2 Rear View

#	Item	Description
1	Rear Camera Lens	Black, cutting glass, bottom silkscreen
2	Rear Cover Module	Rear Cover Module includes rear cover, rear camera lens

Top View

Figure 1.3 Top View

#	Item	Description
1	Receiver mesh	Black-silver, steel mesh

Bottom View

Figure 1.4 Bottom View

Left View

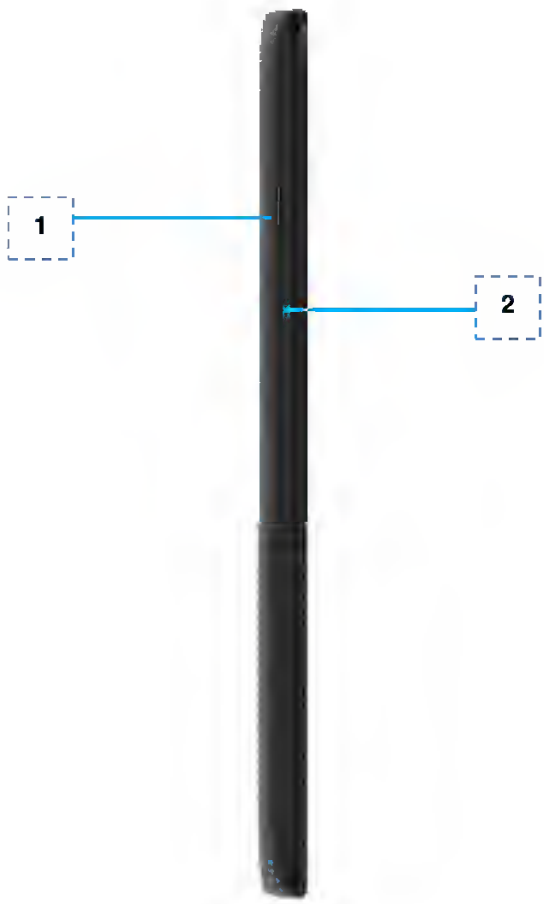


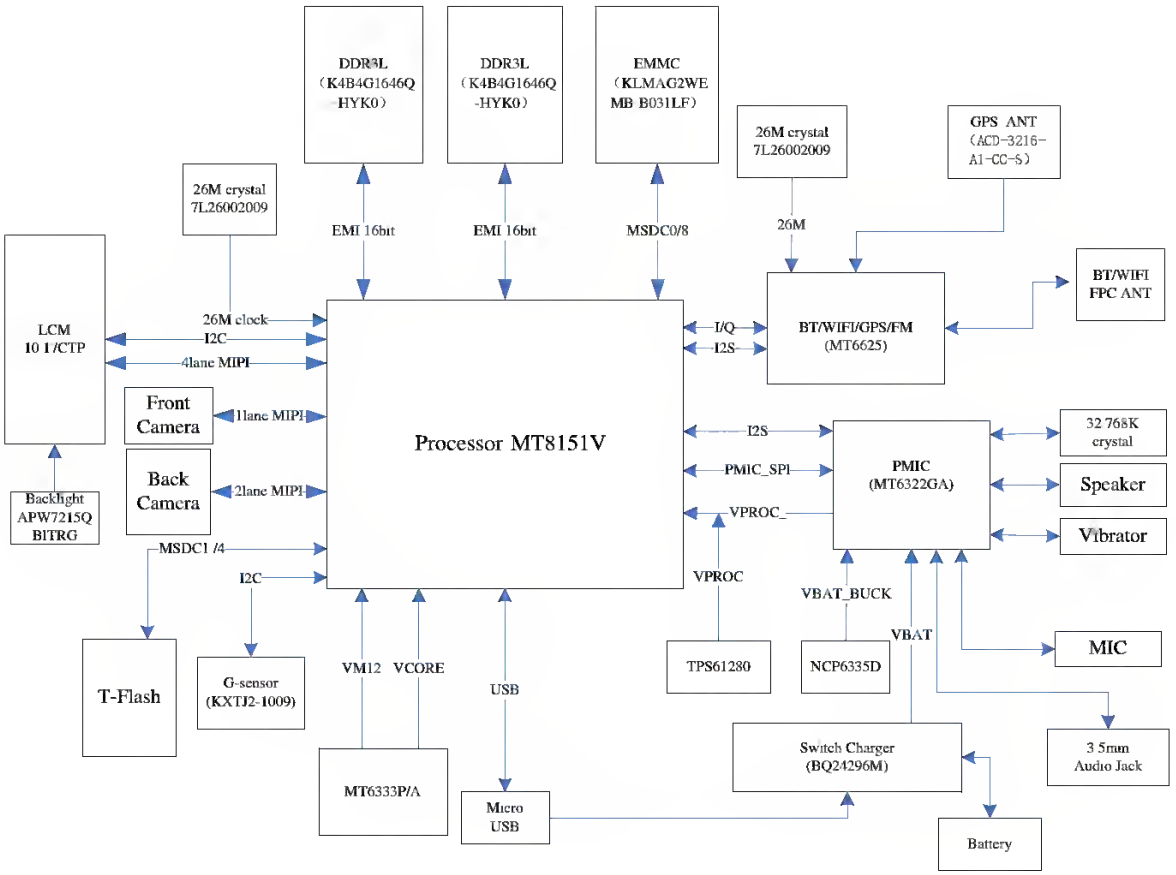
Figure 1.5 Left View

#	Item	Description
1	Power Key	Power on or off the tablet.
2	Volume Key	Increases or decreases the tablet volume.

Right View

Figure 1.6 Right View

System Block Diagram



CHAPTER 2

Diagnostic Utilities

Introduction

The Longines TAB has a flash tool designed to software upgrading and a writing tool designed to write SN/IMEI/BT/Wifi/Country Code,etc.

Longines's Flash Tool SOP

This document will give the sop of Longines's Flash Tool. It includes two parts-the open of flash tool and the download of a version.

1. Open flash tool

After decompress the flash tool archive, the flash_tool.exe shows in Figure1 is the tool that we need.

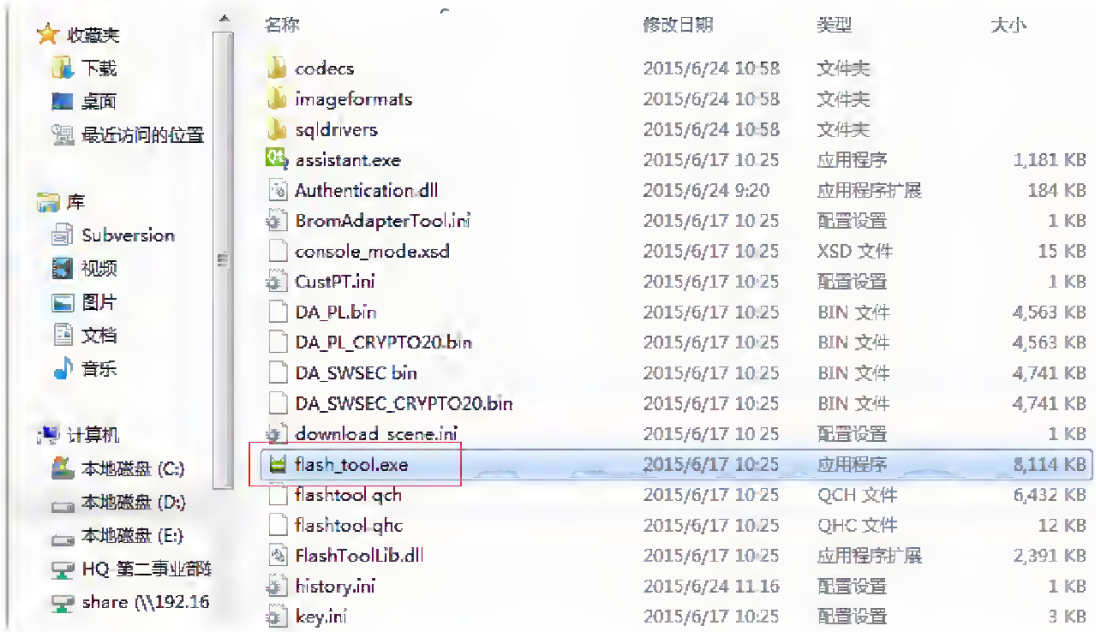


Figure 1 The location of flash_tool.exe

Double check the flash_tool.exe, Figure 2 will show up, and after the "ok" button is clicked, we will enter the download interface (Figure 3). The download of Fossil HD's versions will be operated in this interface. By now, we can start to use the flash tool.

Smart Phone Flash Tool
The scatter file cannot found, please make sure the file is exist before download.
OK
Help
SP Flash Tool is loading...
@2010 Media Tek CorporationAll Right resvered

Figure 2 The dialog shows up while double check the flash_tool_acer_only..exe

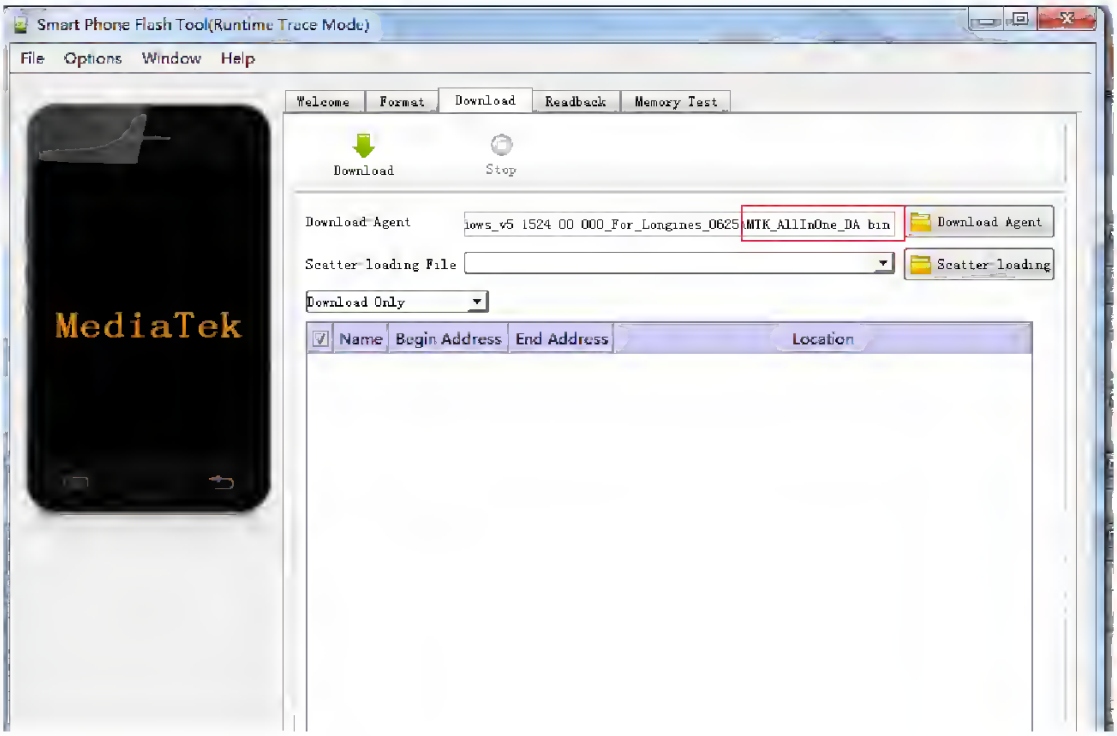


Figure 3 The download interface of flash tool

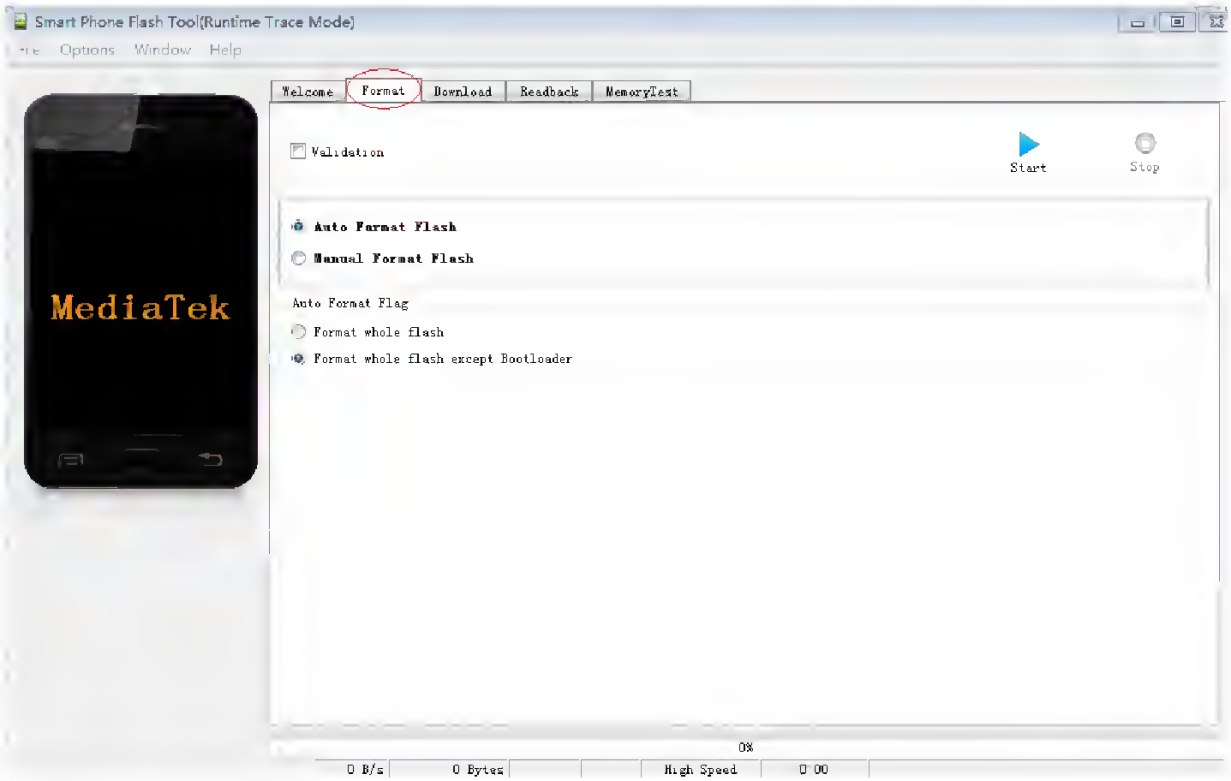


Figure 4 The format interface of flash tool (forbidden)

As shown in Figure 4, the "Format" interface is forbidden to use. We just need to use the "Download" interface shown in Figure3.

2. Download a Fossil HD's whole version

It includes three steps shown in Figure 5, Figure 6 and Figure 7.

Step 1 and Step 2: click the "Scatter-loading" button to find MT8127_Android_scatter.txt, and then click the "open" button to open the txt file. The file exists in the same folder that contains the image folder.

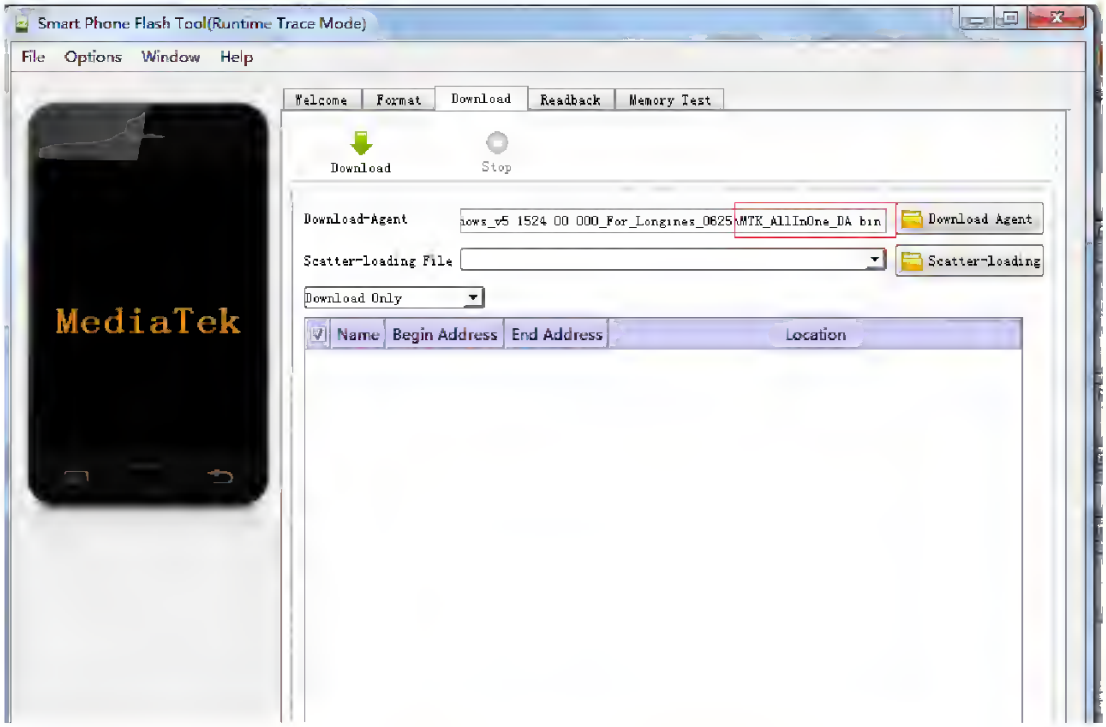


Figure 5 Select a version

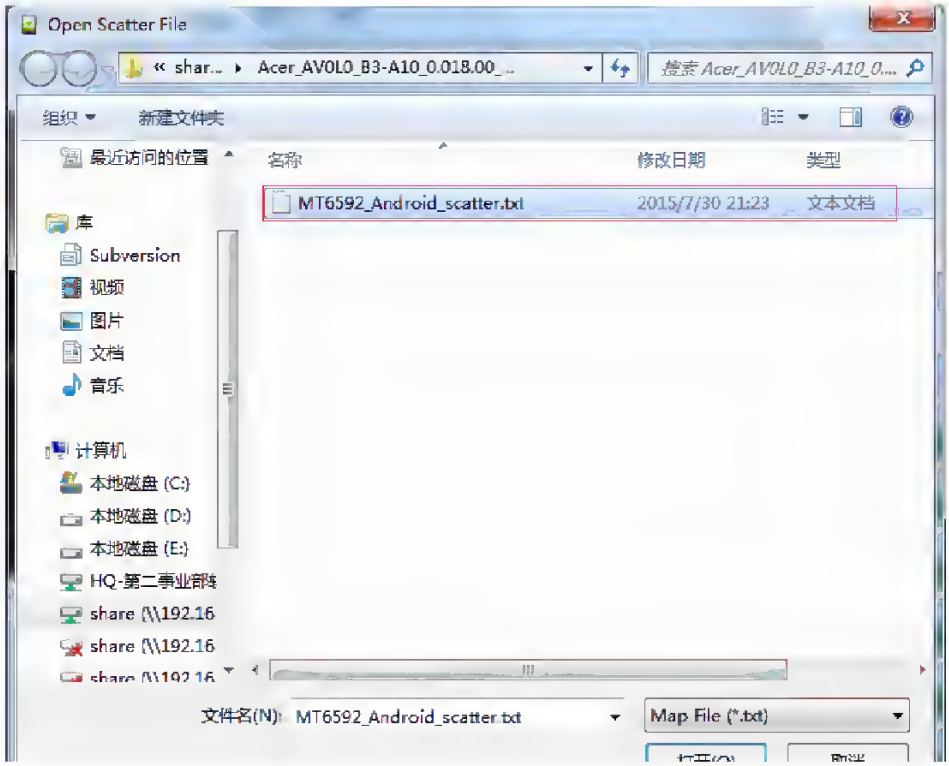


Figure 6 Find MT8127_Android_scatter.txt

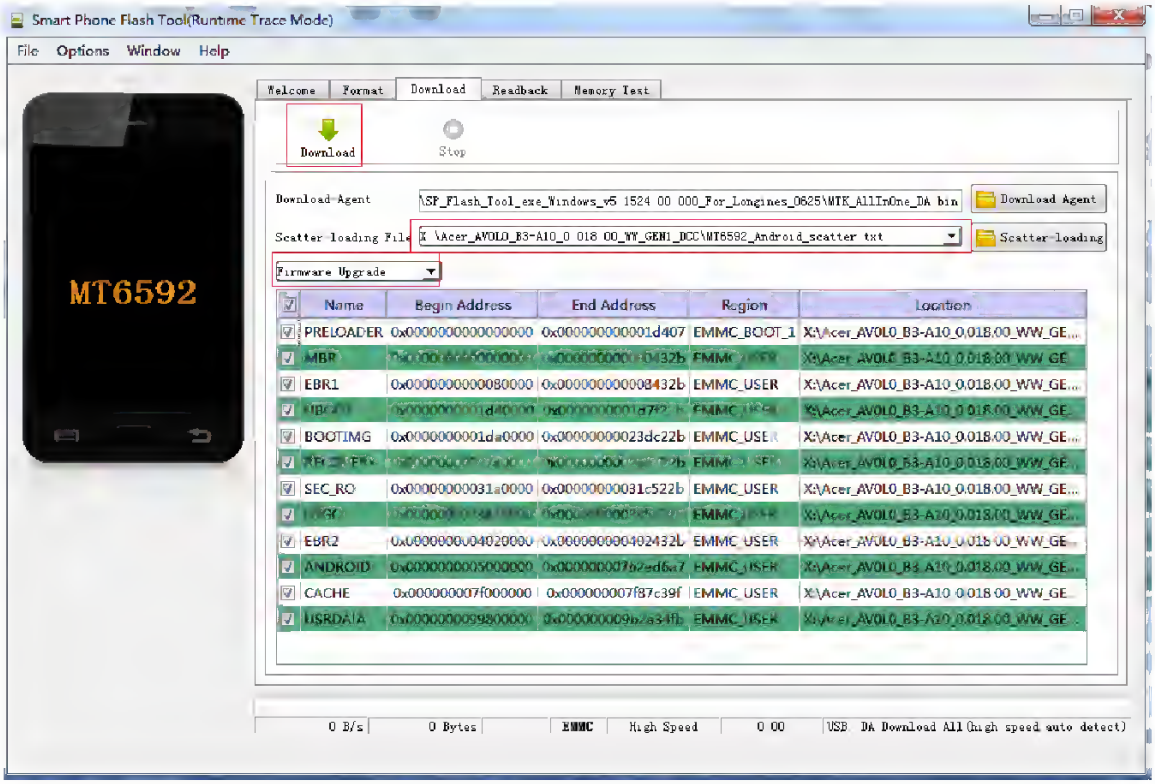


Figure 7 Download the version

Step 3: make sure the download pattern is “Firmware Upgrade”, press the device’s “Volume +” key, and then connect the android device after power failure with the computer through USB. When the download ok dialog shows up, it means the download of secro-sign.img has been completed.

Remember never use the Format pattern to download versions. All download patterns are shown in Figure 11 as additional information.

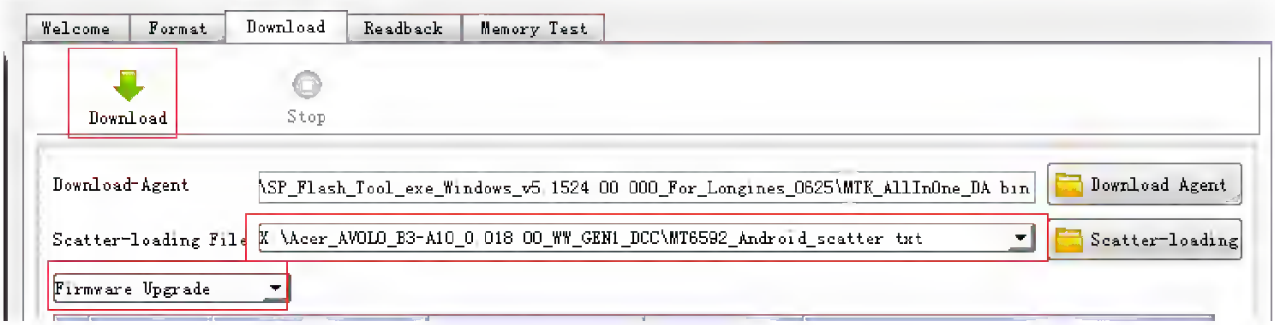


Figure 8 Download patterns

Figure 9 is the interface shown during the downloading process.

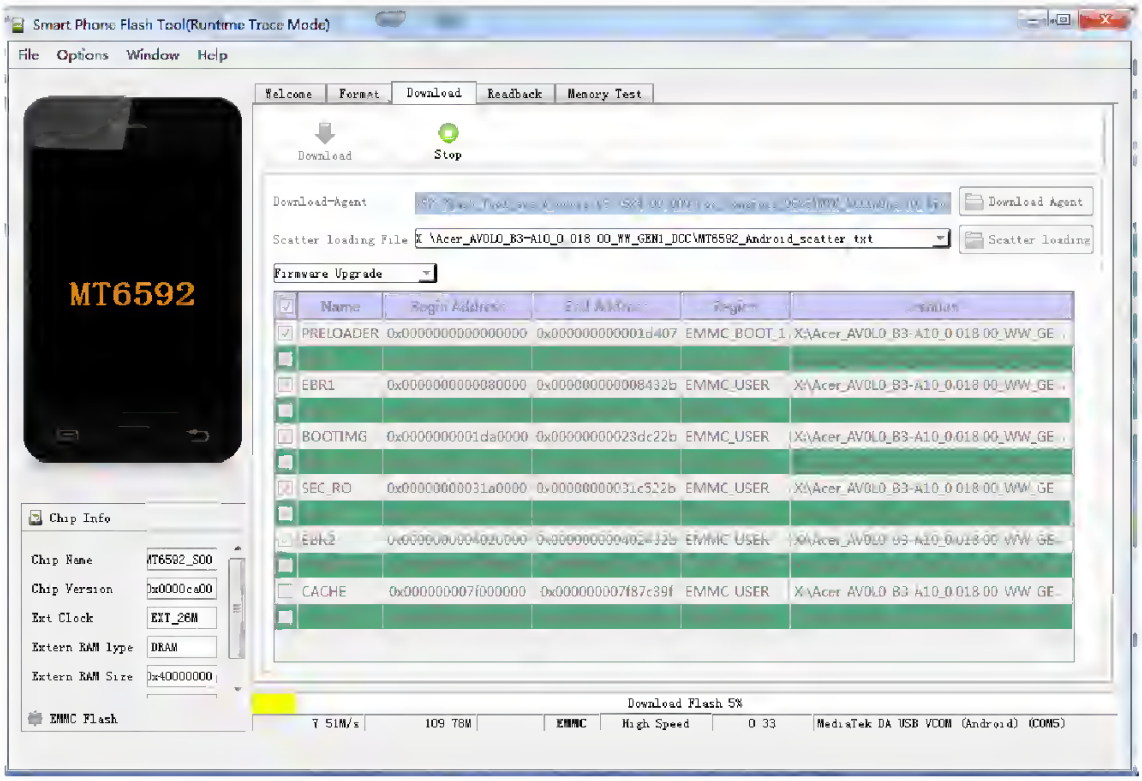


Figure 9 Downloading

While the interface in Figure 10 shows up, it means the download of version completed.

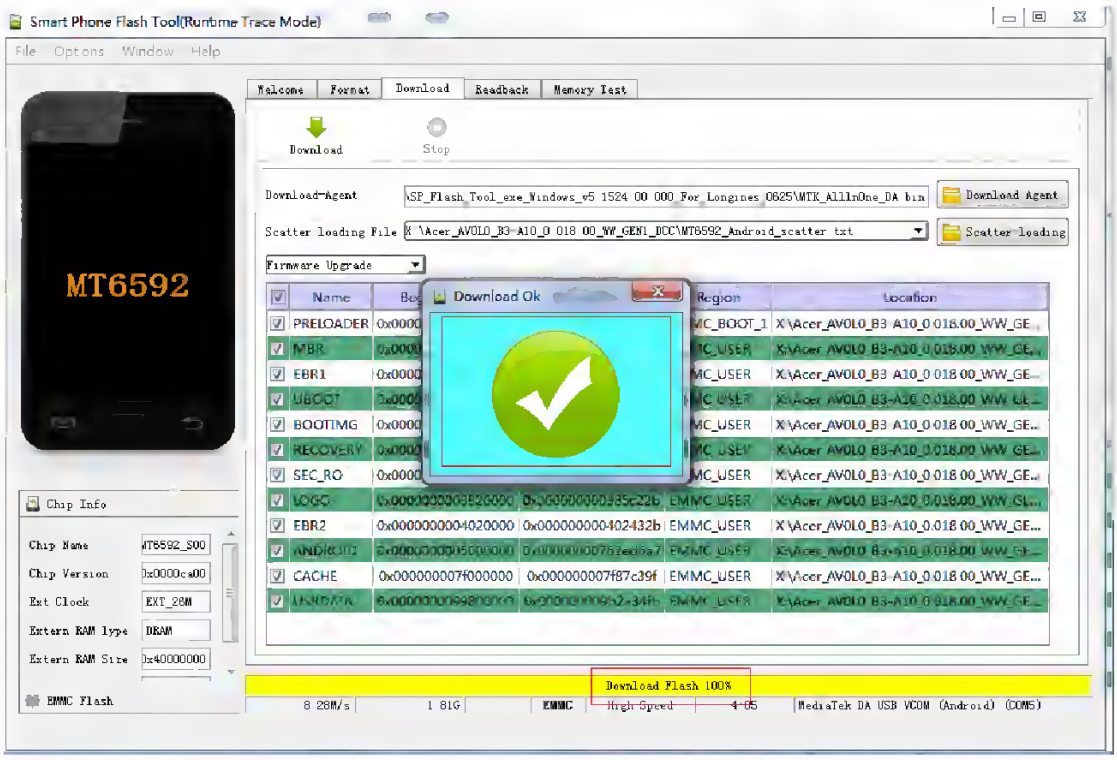


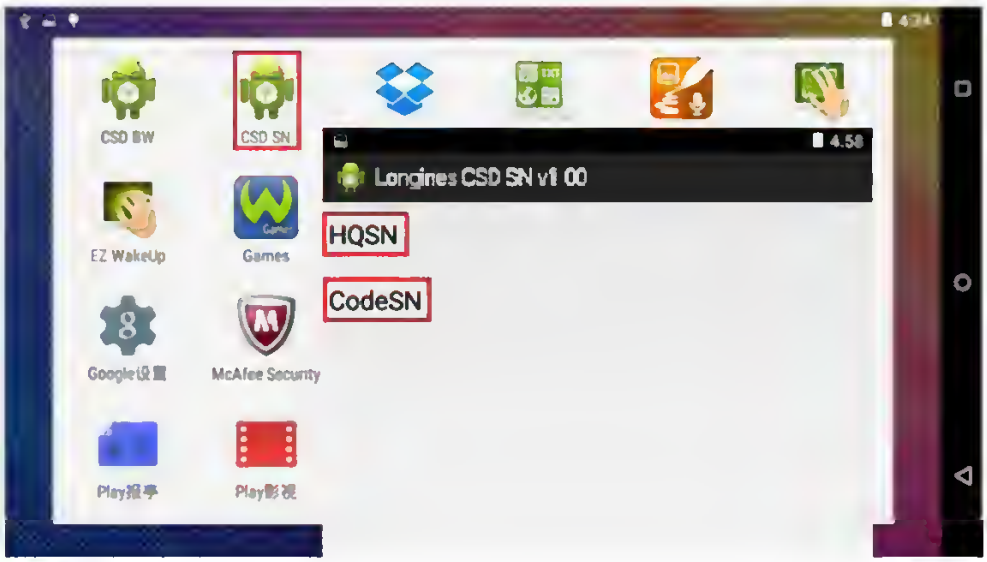
Figure 4 Download is completed

Rewrite SN, IMEI, BT & WIFI APK SOP

HOW TO SET UP THE SN OF YOUR DEVICE

1. Preparations

Install CSD SN app which will help you set SN (Serial Number). Click the icon to launch this app and you will see two buttons.

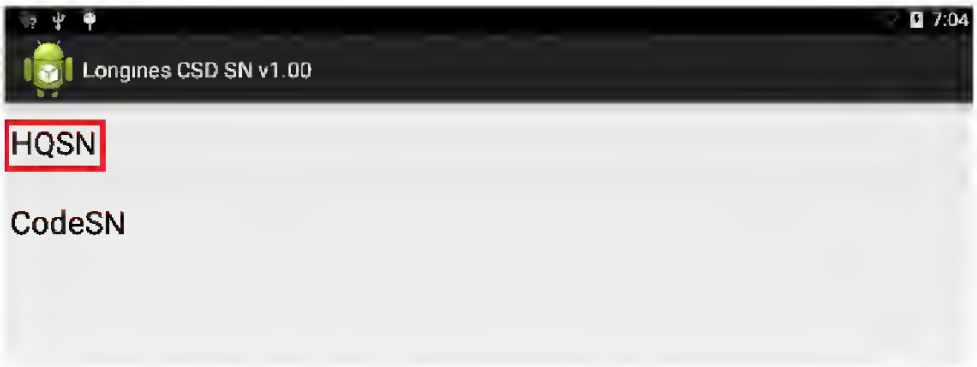


2. Write HQSN

Step1 set a new HQSN

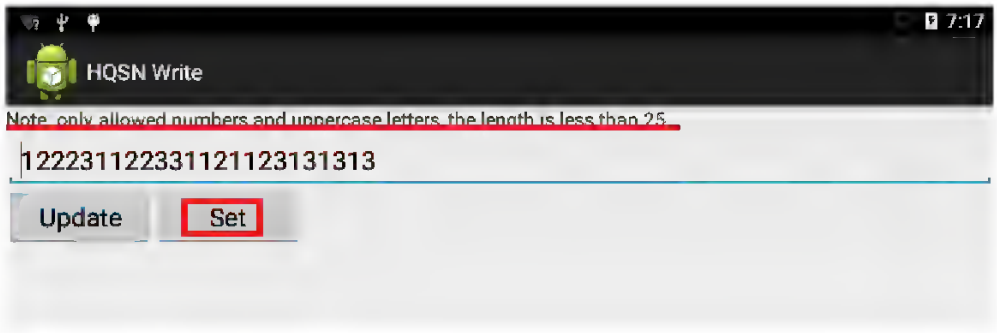
Click "HQSN" button to set the SN of the chip and you would see there is an edit text which you enter you validated SN (serial number). When SN is done you can click the set button to write SN into the chip. When succeed, you will see the information that write hqsn into ap nvram success.

Note: only numbers and uppercase letters allowed and no more than 2S.



Step2 show HQSN

If you choose the "update" button, the SN in your chip will be displayed on the line, and of course the SN should be there.



3. Write CodeSN

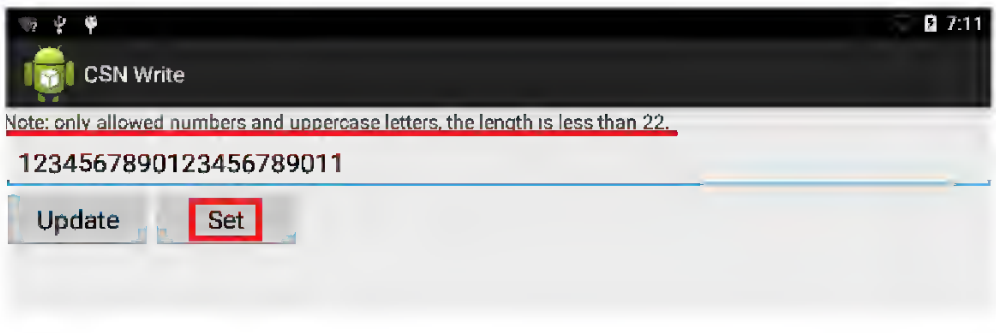
Step1 set a new CodeSN

The same as step3, but this time you will set the SN of your device. Click "CodeSN" button to set the SN of your device and you would see there is an edit text which you enter your validated SN serial number. When SN is done you can click the "set" button to write SN in device. When succeed, you will see the information that write sn into ap nvram success.

Note: only numbers and uppercase letters allowed and no more than 22.

Step2 show CodeSN

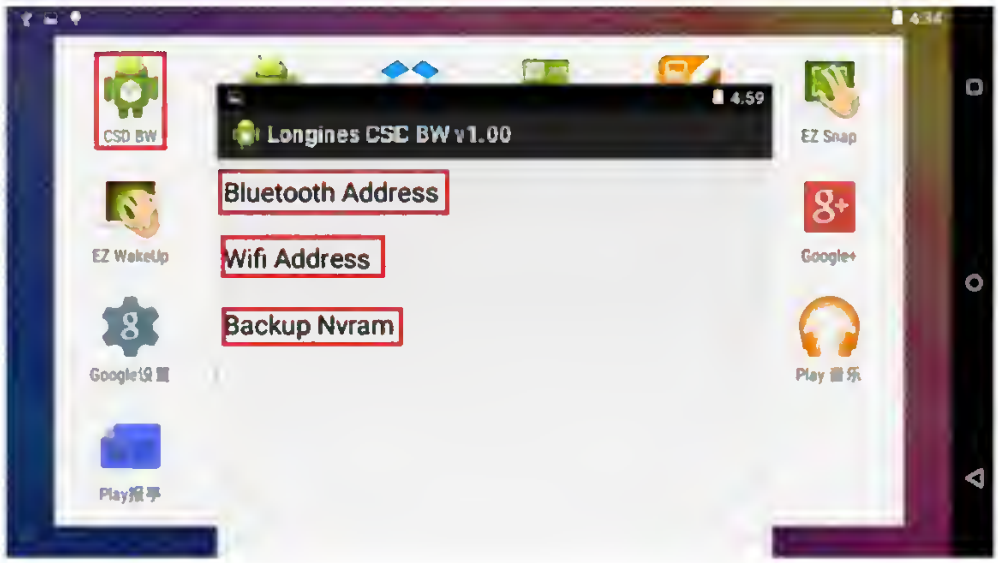
If you choose the "update" button, the SN in your device will be displayed on the line, and of course the SN should be there.



HOW TO SET UP THE BW OF YOUR DEVICE

1. Preparations

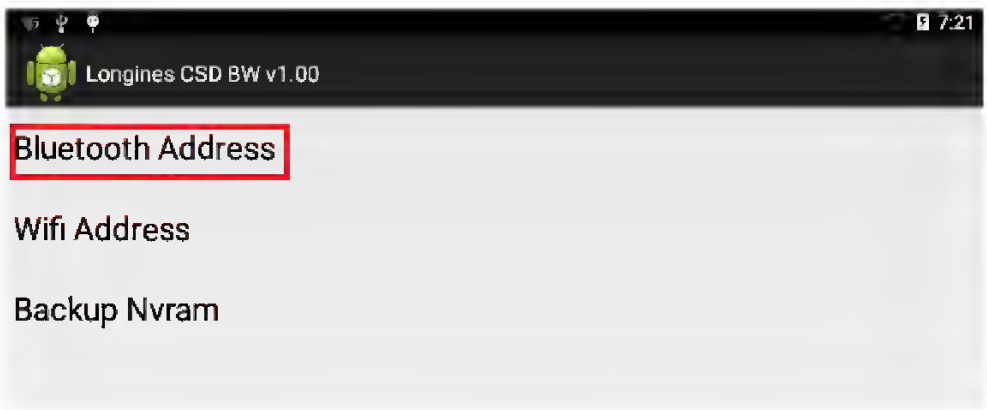
Install CSD BW app which will help you set BW(Bluetooth address and wifi address). Click the icon to launch this app and you will see three buttons.

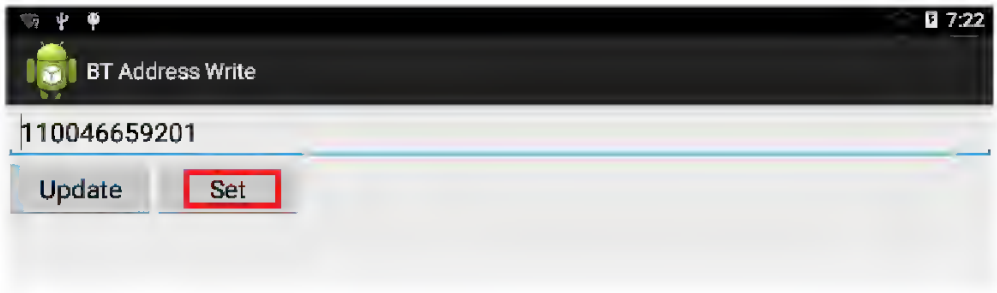


2. Write Blutooth Address

Step1 Set validated Bluetooth Address

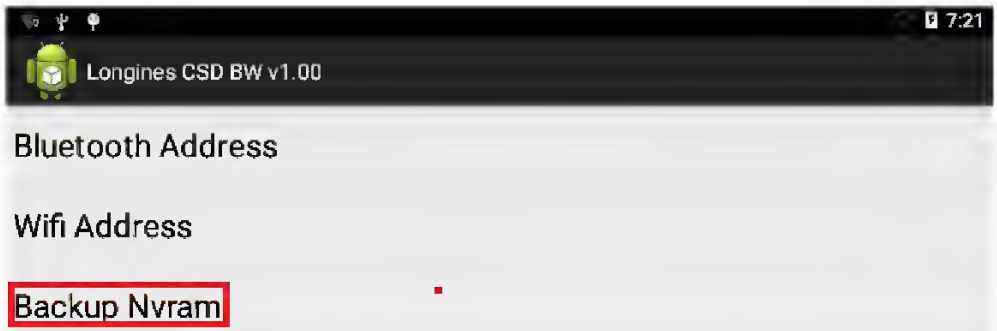
Click "Bluetooth Address" button to set the Bluetooth Address. You can use the default serial number on the line or a new one and click set button. The update button will show you the original Bluetooth Address. If you see the information about success at the bottom of your device, congratulation, you make it.





Step2 Backup Address

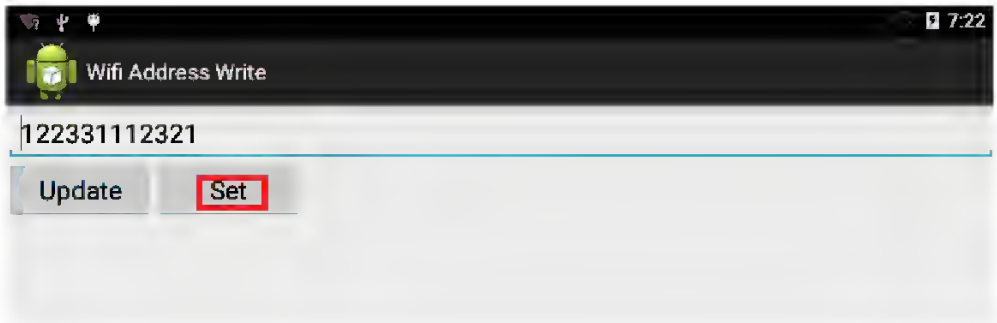
Do not forget to click "Backup Nvram" button to make sure bluetooth address will be in your device



3. Write Wifi Address

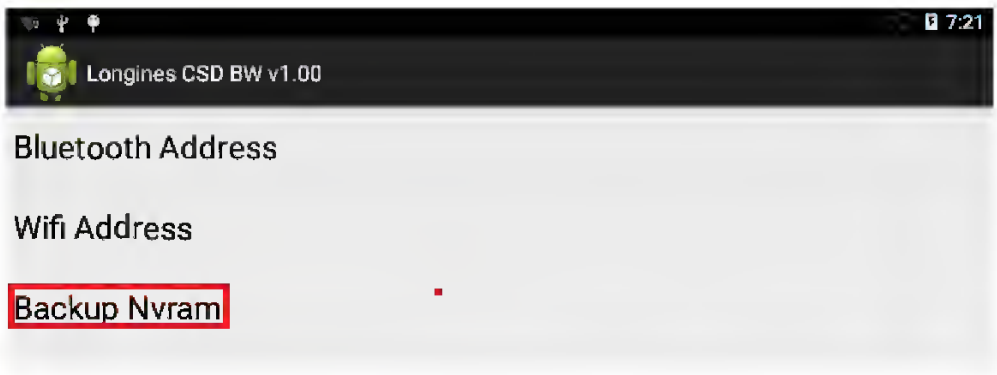
Step1 set Wifi Address

Click "Wifi Address" button to set wifi address. You can use the default serial number on the line or a new one and click set button. The update button will show you the original wifi address. If you see the information about success at the bottom of your device, congratulation, you make it.



Step2 Backup Address

Do not forget to click “Backup Nvram” button to make sure wifi address will be in your device



CHAPTER 3

Service and Maintenance

Introduction

This chapter contains general information about the tablet, a list of tools needed to perform the required maintenance and step by step procedures on how to remove and install components from the tablet.

Disassembly and Assembly Guide

I. Precautions

Before you perform any service and or repair on the tablet, please follow the steps below first.

(1) Be sure that the tablet is powered down.

(2) Disconnect the plug from the tablet.

(3) Remove all rings, watches and any other metal objects from your hands.

(4) Always wear a ground strap on your hand to protect the tablet from static discharge.

II. Appropriate Tools for Reference

The illustrations below show the appropriate tools that should be used for the tablet's service and repair.

(1) Screwdriver

(2) Tweezers

Use a pair of tweezers to remove/insert cables.

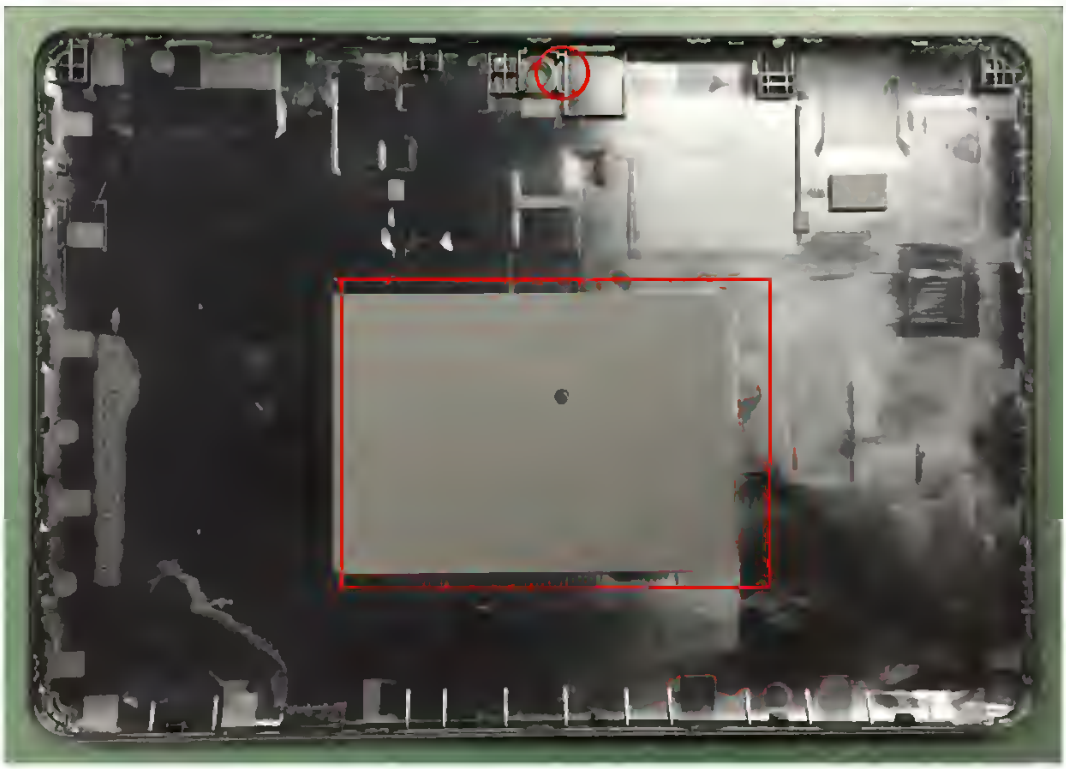
(3) Disassembly Blade

III. Disassembly Steps

(1) Disassemble the rear cover.

Pry into the gap from side key button location, separate the rear cover from tablet as the arrow shown.

Remark: The disassembly part is the defined rear cover module, including rear cover, rear camera lens and cooling membrane.



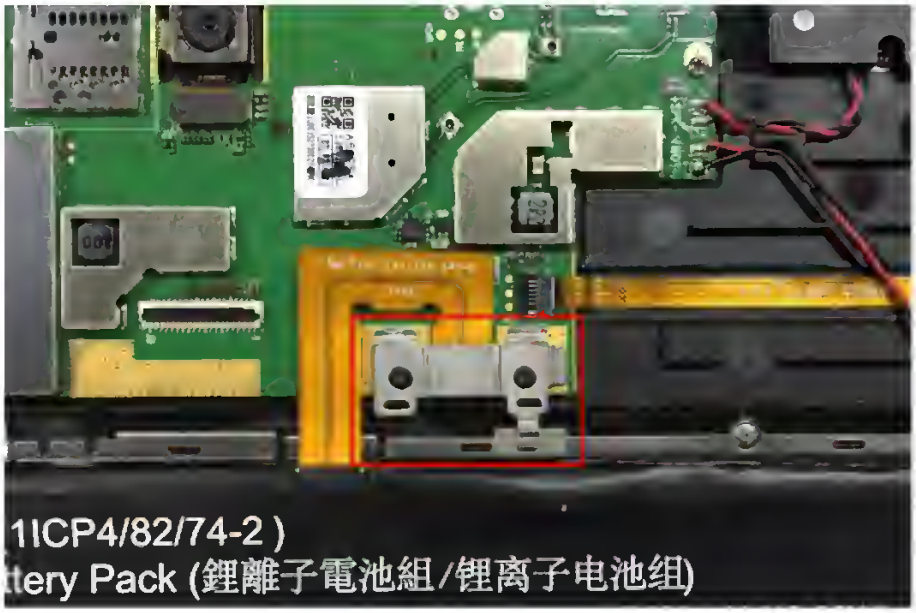
(2) Disassemble the LINK FPC.

Firstly, tear off the yellow mylar on LCM connector.

Secondly, disassemble the LINK FPC from MB and LCM connector.

(3) Disassemble the battery.

Firstly, disassemble two screws and remove the steel disc.



Secondly, disassemble the battery FPC from connector.

Thirdly, pry into the gap and disassemble the battery from tablet as the arrow shown.

型號/型号/Model：ZA6025 (1ICP4/82/74-2)
Rechargeable Lithium Ion Battery Pack (鋰離子電池組/锂离子电池组)
(電壓/电压) Rating: 3.8V
Minimum:5180mAh/19.68Wh
(充電限制電壓/充电限制电压)Limited Charge Voltage : 4.35V Typical .5340mAh/20.29Wh
CAUTION:Risk of explosion if battery is replaced by an incorrect type
Dispose of used batteries according to the instructions.Do not incinerate.
(or)disassemble;may explode or release toxic materials.Do not short circuit;may cause burns.
注意事項，请参阅说明书的安全指示使用电池。如有问题请与电脑供应商联络。
使用其他电池替换，将可能引起安全问题，请勿丢至于火里或水里。电池浸水后禁止使用！
Made in China(中國製造/中国制造) (Cell Origin China)
S/N K10020(001526001D54N00

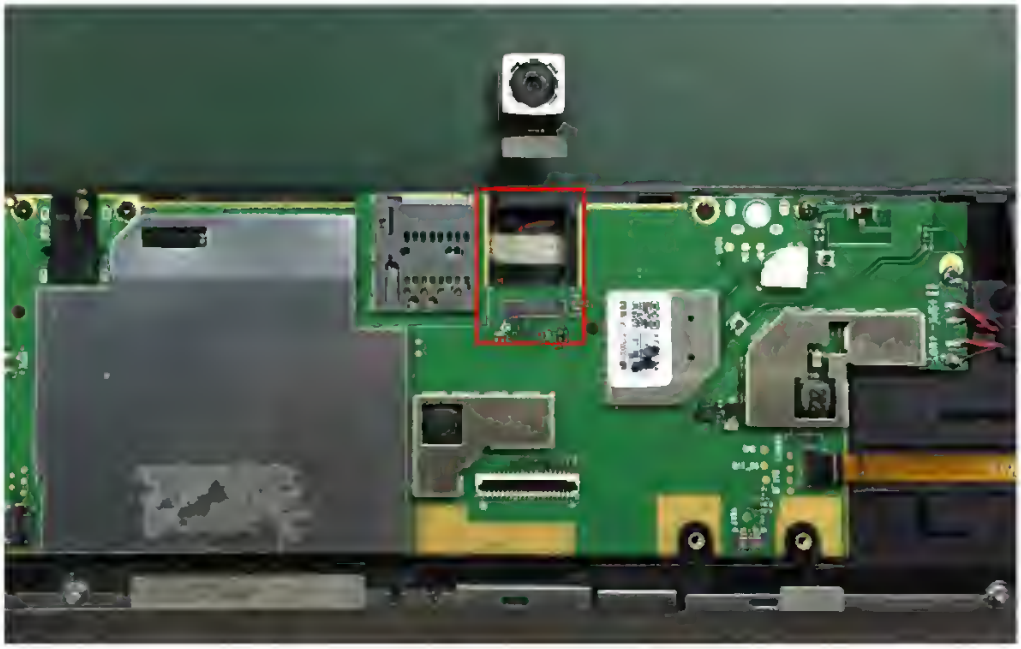
型號/型号/Model：ZA6025 (1ICP4/82/74-2)
Rechargeable Lithium Ion Battery Pack (鋰離子電池組/锂离子电池组)
CAUTION:Risk of explosion if battery is replaced by an incorrect type
Dispose of used batteries according to the instructions.Do not incinerate.
Made in China(中國製造/中国制造) (Cell Origin China)

WEEE annex VII part： battery

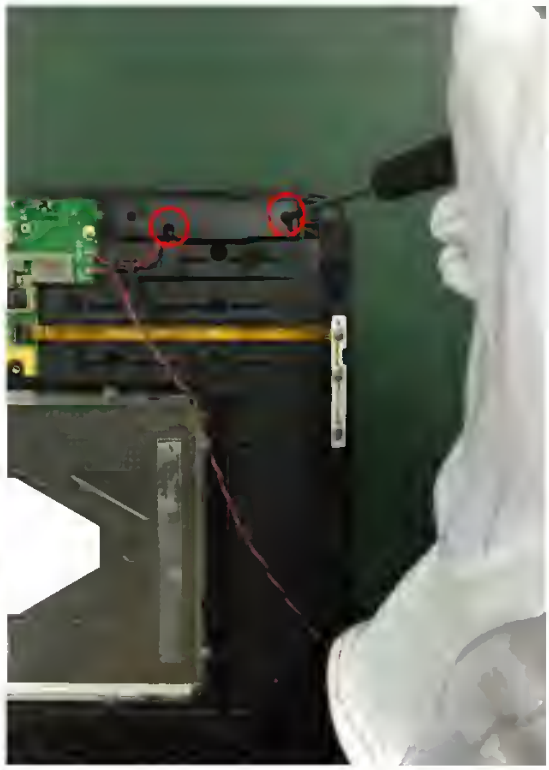
(4) Disassemble the MB and assemblies.

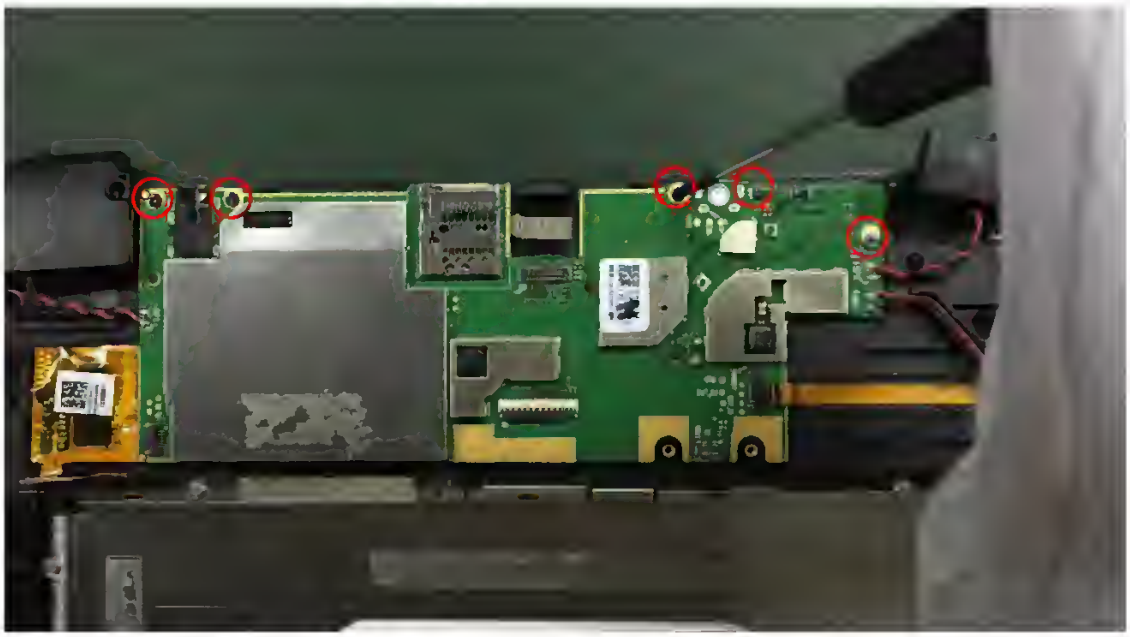
Firstly, disassemble the yellow mylar on CTP IC FPC and the silver conductive fabric on MB.

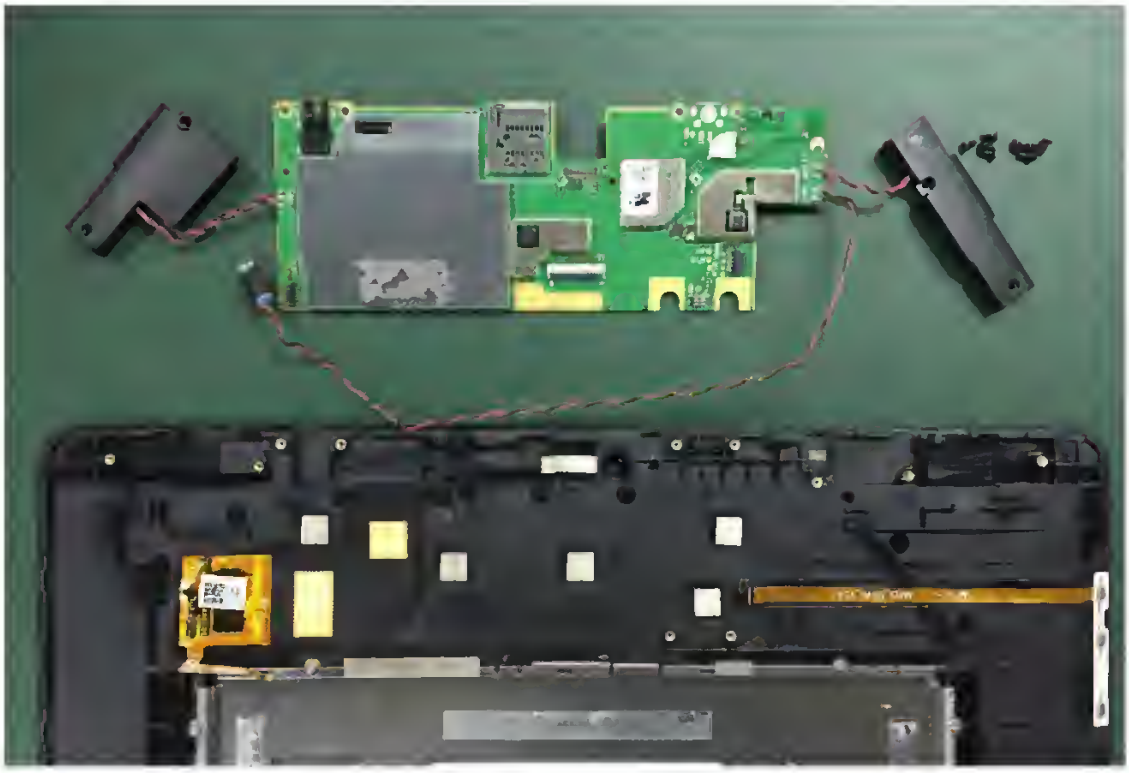
Secondly, disassemble the rear camera, motor and cable.



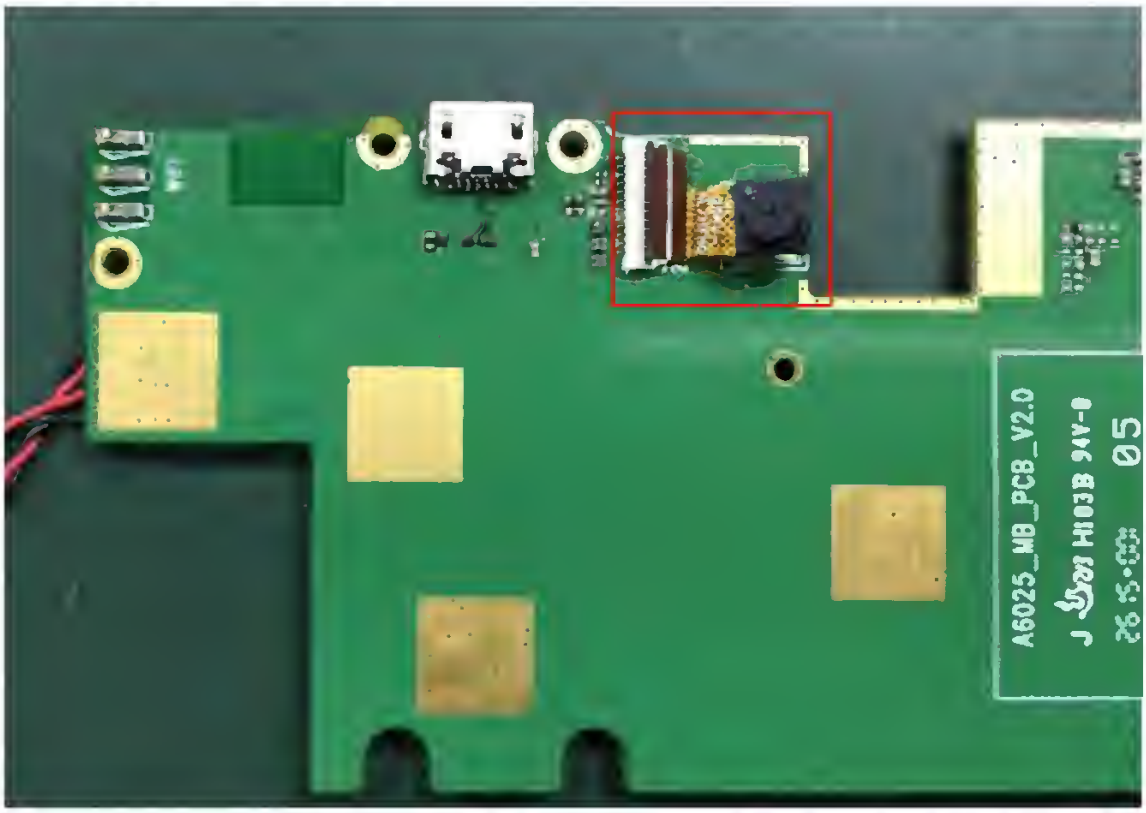
Thirdly, disassemble 4 screws on the speaker boxes and 5 screws on MB.



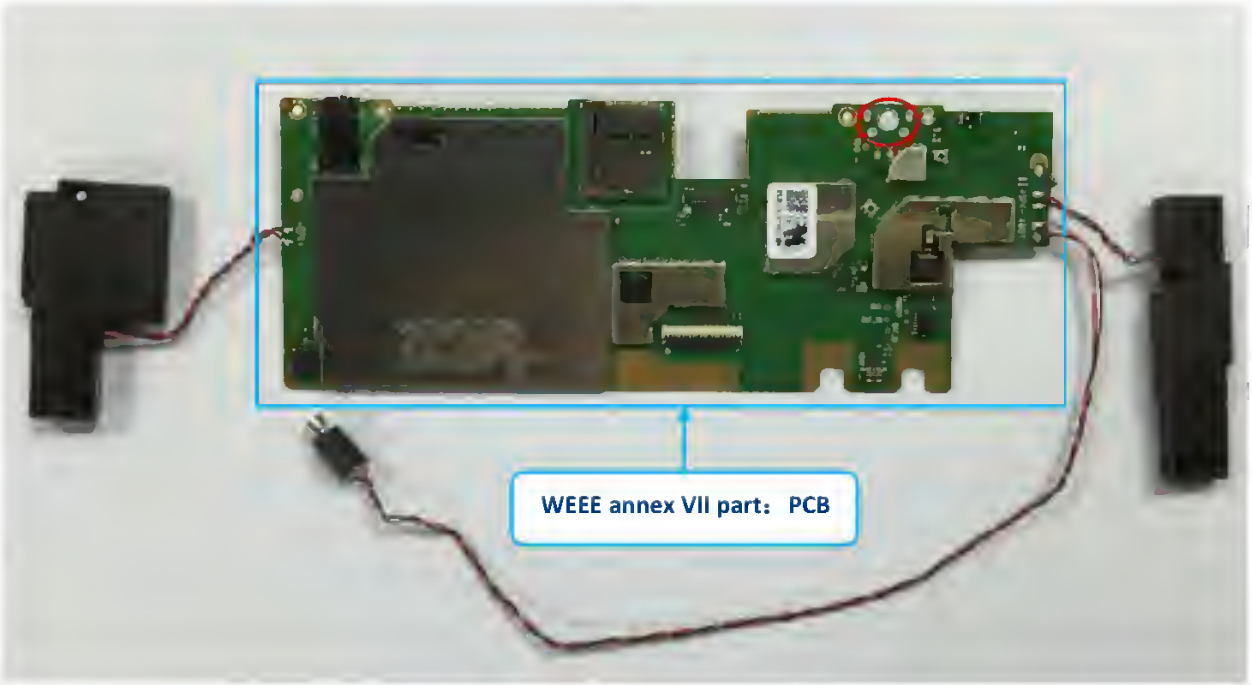




(5) Disassemble the front camera and back block-up foam.

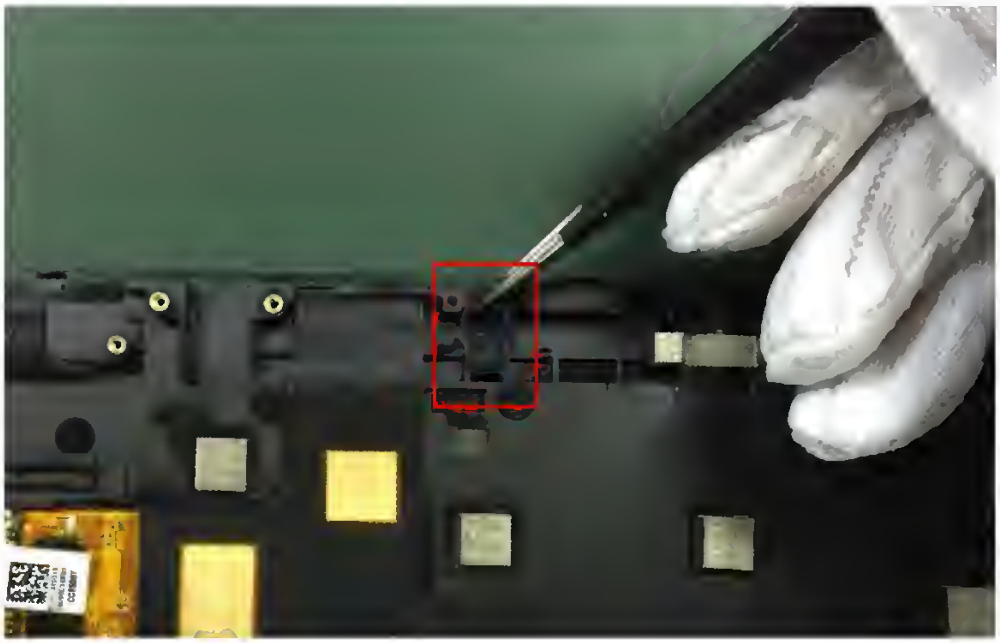


Remark: The disassembly part is the defined MB module, including MB, waterproof label, speaker boxes and motor.

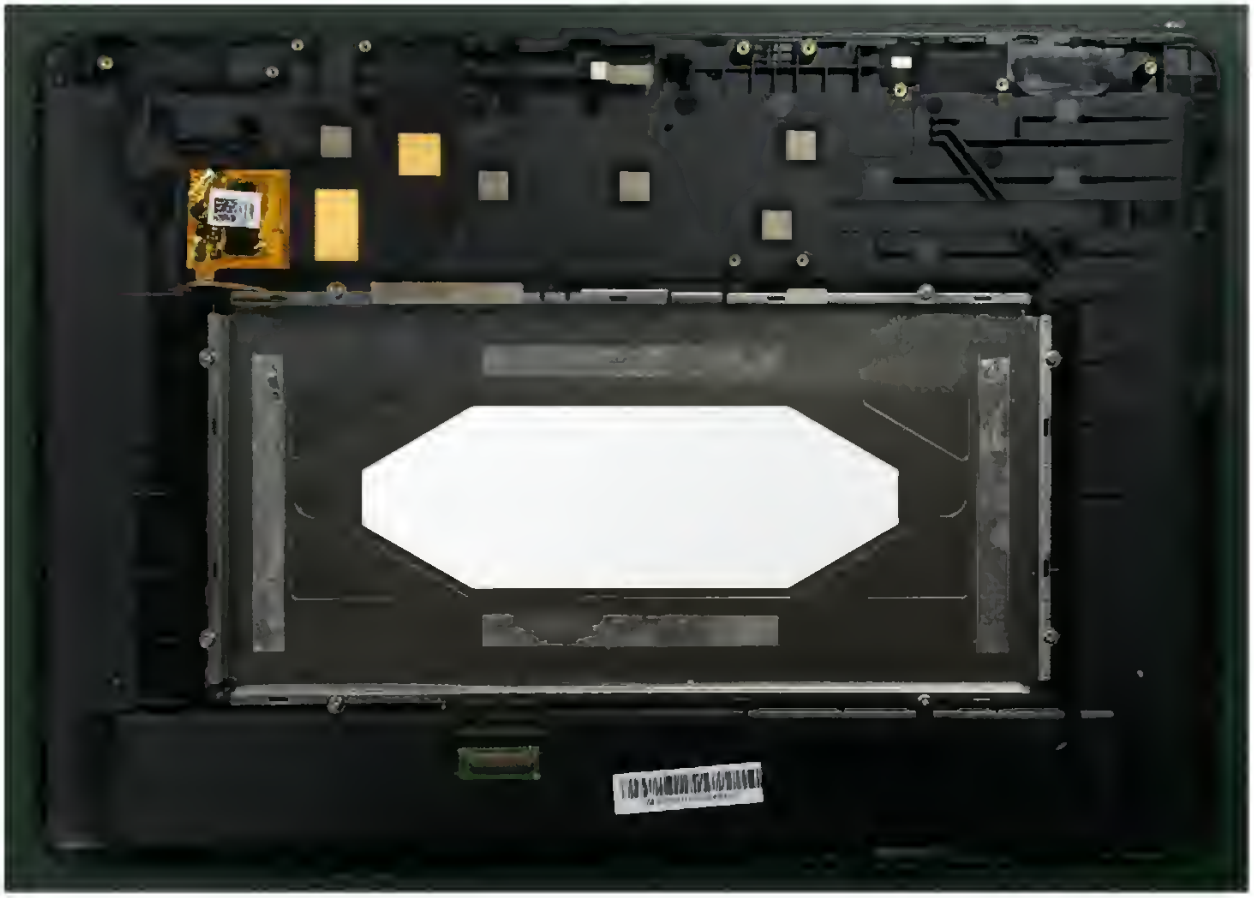


(6) Disassemble the side key FPC.

(7) Disassemble the MIC rubber cap.



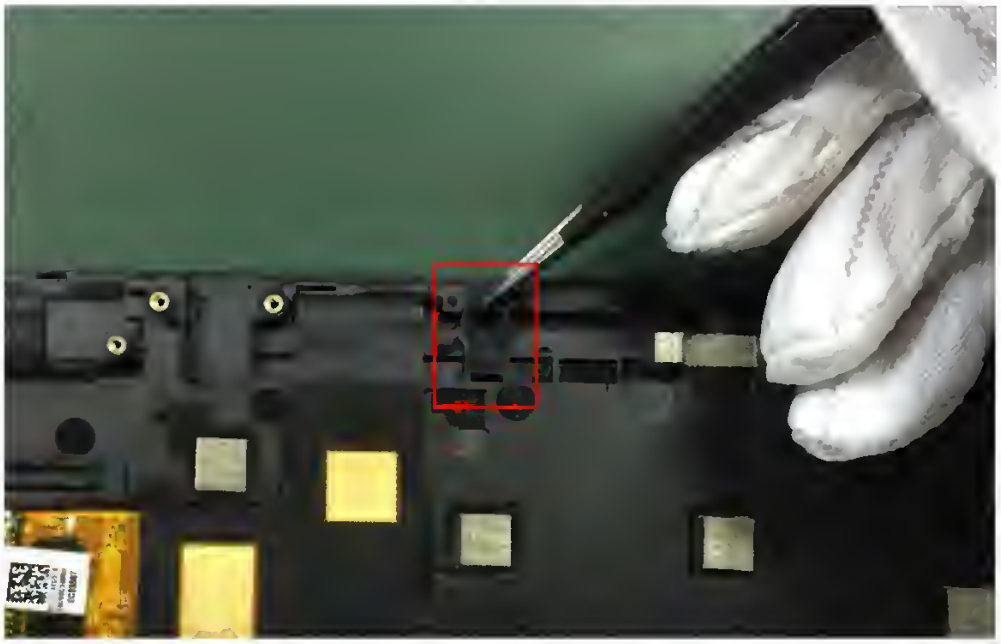
Remark: the remaining part is the defined LCD module, including TP, LCM, front cover, 6 pcs of conductive foam (one is assembled under the CTP IC).



acer
WEEE annex VII part：LCD

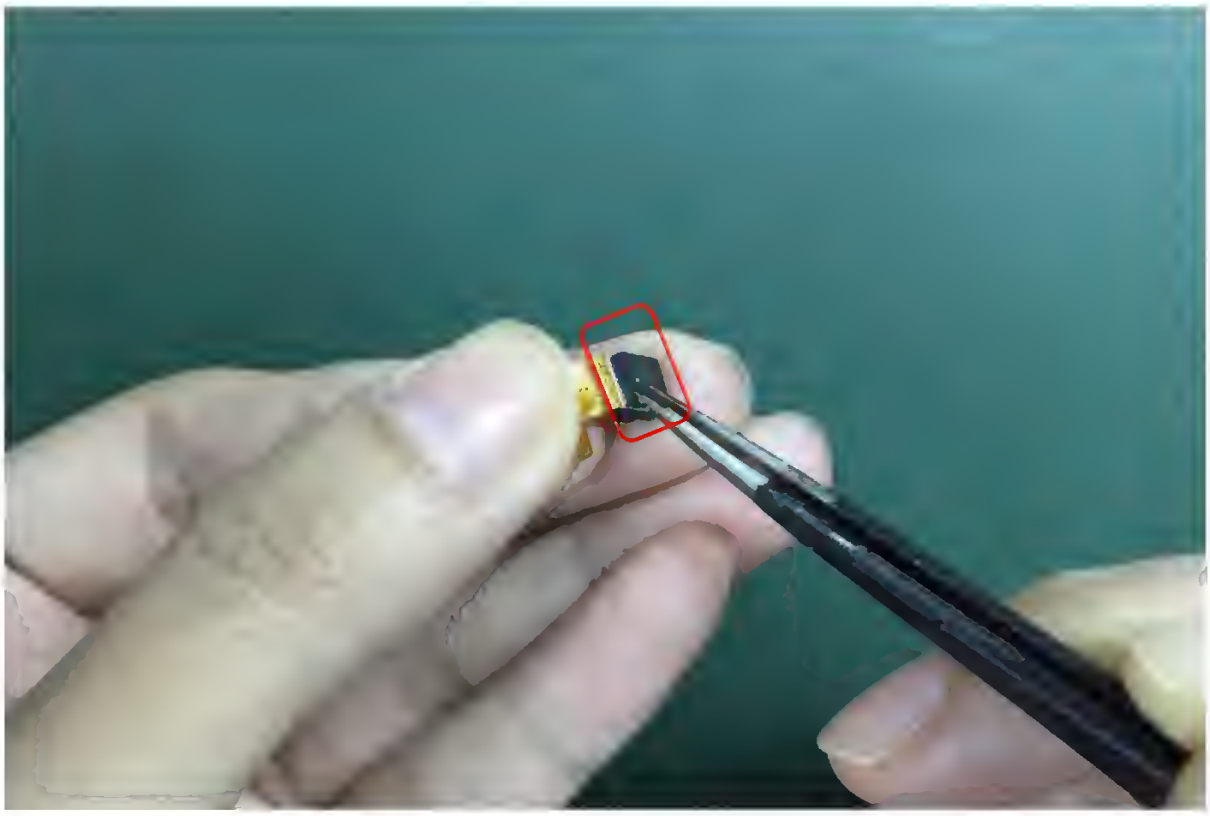
IV. Reassembly Steps

(1) Reassemble the MIC rubber cap.

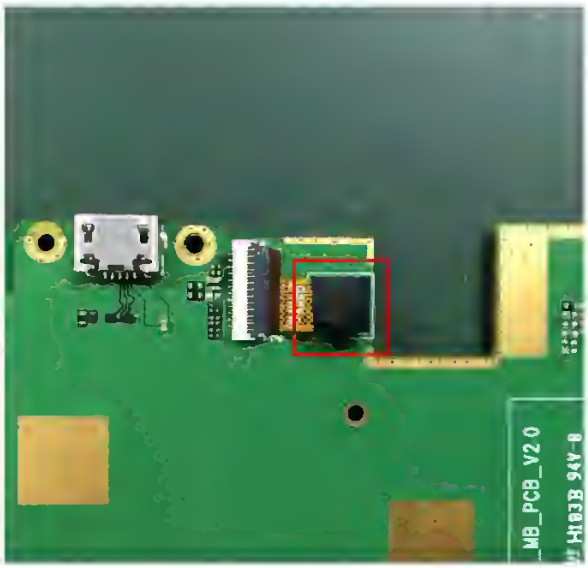


(2) Reassemble the side key FPC.

(3) Assemble the back block-up foam and front camera on MB.

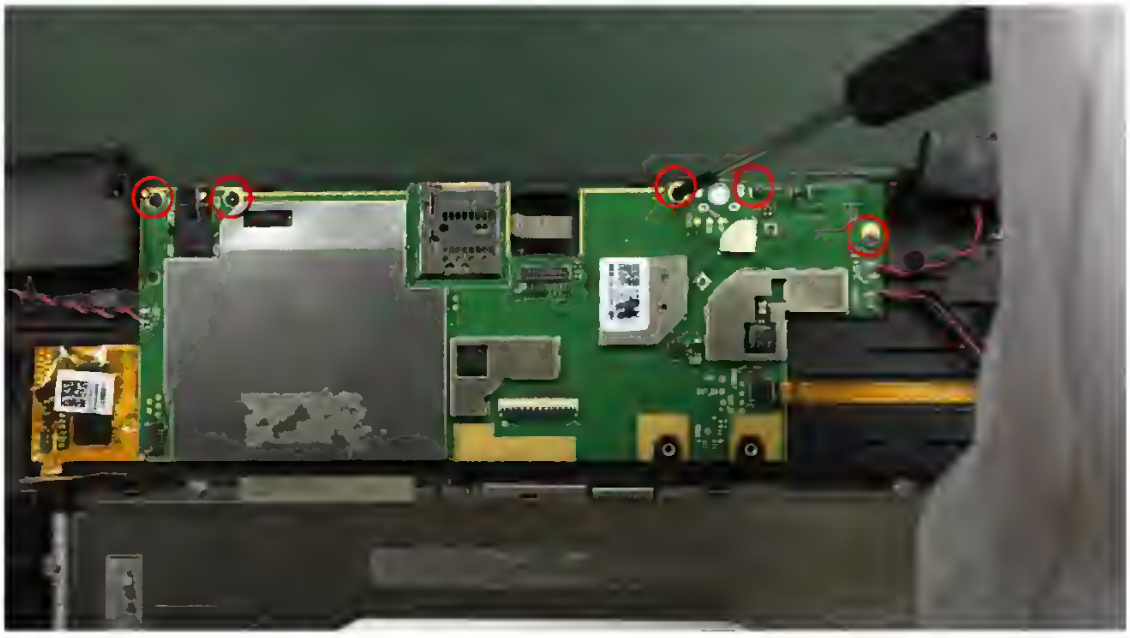


The front camera should be assembled within the white silkscreen.



(4) Assemble the MB on tablet.

Firstly, assemble 4 screws on the speaker boxes and 5 screws on MB.

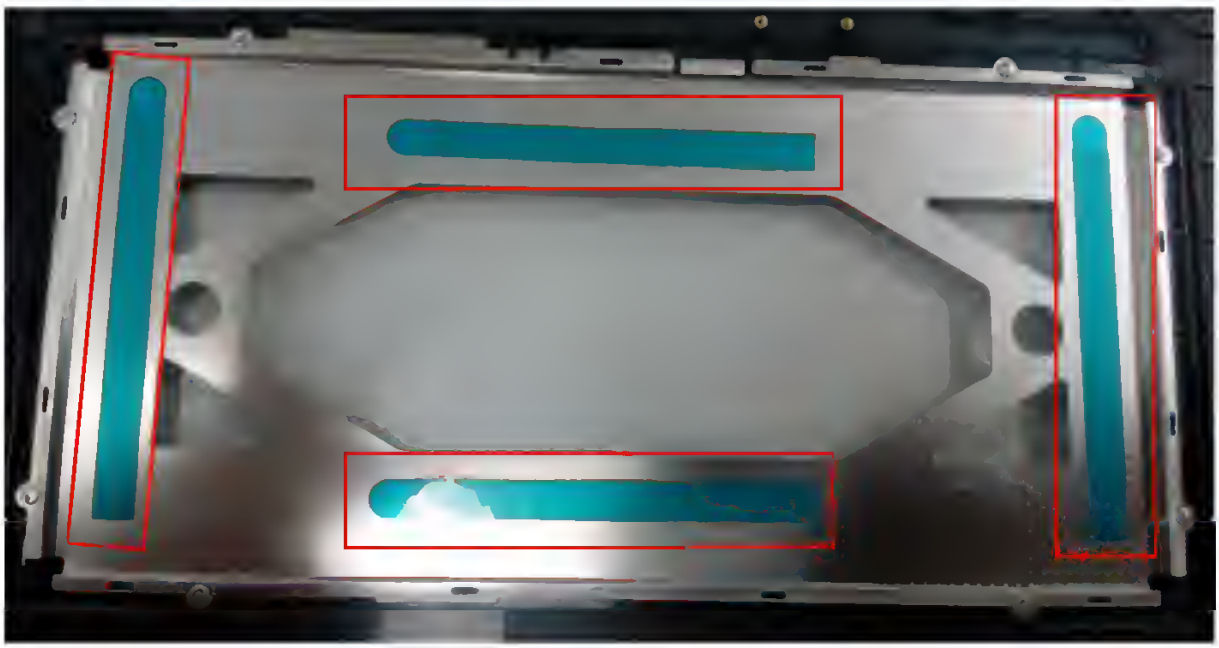


Secondly, tear off the protective membrane and assemble the rear camera on MB.

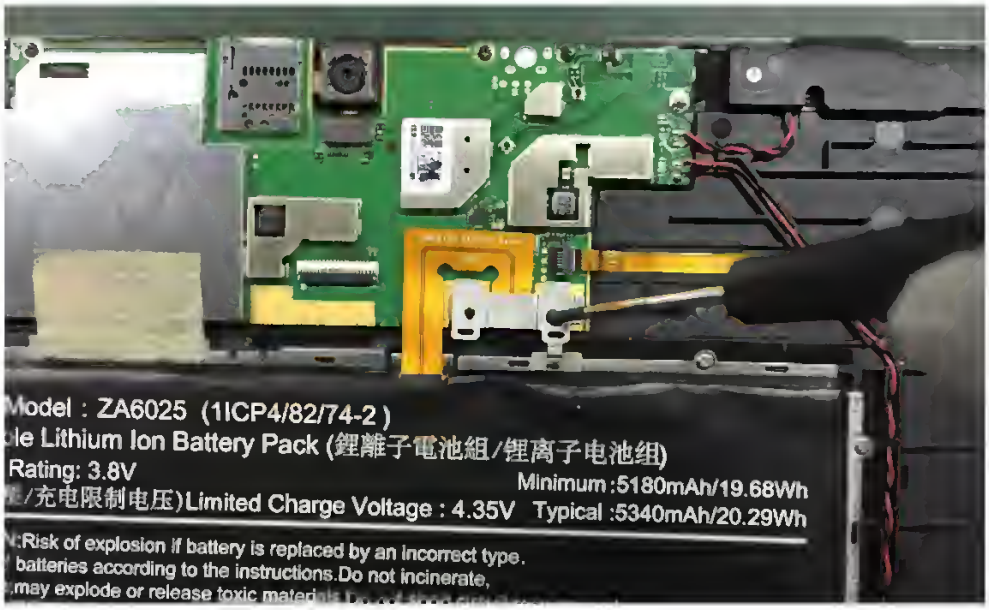
Thirdly, assemble the speaker boxes, motor and cables on tablet.

Fourthly, connect CTP IC FPC and side key FPC with MB connector. Then assemble the yellow mylar on CTP IC FPC and the silver conductive fabric on MB.

(5) Assemble the battery.
Firstly, tear off the release paper on front cover and assemble the battery.



Secondly, assemble the battery FPC on MB connector, fix 2 screws on the steel disc.


Model : ZA6025 (1ICP4/82/74-2)
Rating: 3.8V
Minimum :5180mAh/19.68Wh
Limited Charge Voltage : 4.35V Typical :5340mAh/20.29Wh
batteries according to the instructions.Do not incinerate,

(6) Assemble the LINK FPC from MB and LCM connector, and paste the yellow mylar on LCM conector.

(7) Combine the battery cover with tablet.

IV. L2 Troubleshooting Guide

1. Fail to power on

NO.	Issue Description	Cause	Solution
1	Fail to power on	Side key FPC isn't welded well	re-weld
		side key FPC breaks	replace side key FPC
		MB has defects	Refer to MB Service Manual

1. Check if the FPC is damaged or connects improperly
2. Replace the FPC
3. Check and repair MB

2. LCD issue

NO.	Issue Description	Cause	Solution
1	LCD shows blank screen/white screen/lines	LINK FPC isn't well assembled	re-assemble LINK FPC
		FPC breaks	replace LCD
		MB has defects	Refer to MB Service Manual
		SW cause	re-update software
		FPC connector damages	replace LCD
2	LCD has defective appearance	LCD scratches	replace LCD
		LCD is damaged	replace LCD

3. TP issue

NO.	Issue Description	Cause	Solution
1	TP touch pad fails	FPC isn't well assembled	re-assemble TP FPC
		FPC breaks	replace TP
		MB is damaged	refer to MB Service Manual
2	TP appearance has defects	TP scratches	replace TP
		TP is damaged	replace TP

4. Side key button issue

NO.	Issue Description	Cause	Solution
1	Side key button has no response	Side key FPC's connection has defects	replace FPC
		Side key button has defects	1.replace the battery cover 2.replace side key FPC

1. Check the side key button's touching.

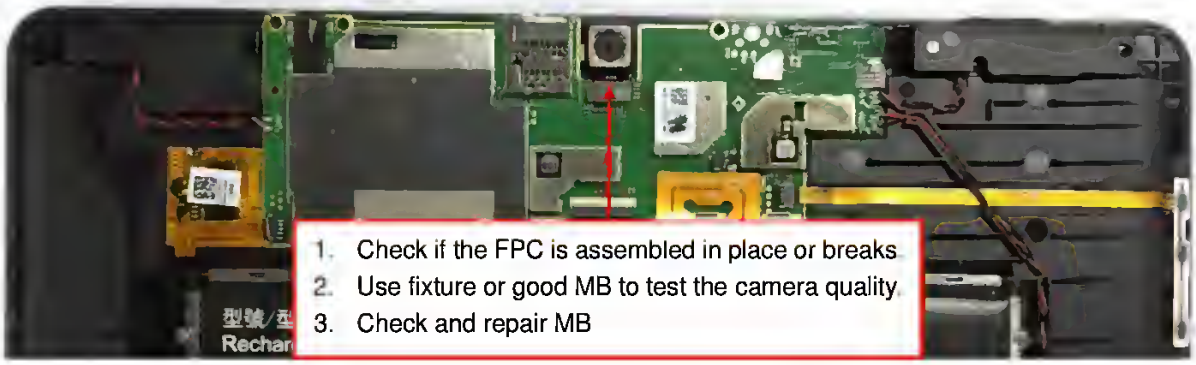
2. Check if the FPC is flexible, if the FPC is inserted in place.
3. Check if the FPC is welded well.
4. Check and repair MB

5. Charging issue

NO.	Issue Description	Cause	Solution
1	No charging	USB cable breaks	Replace USB cable
		Charging head is broken	Replace charging head
		MB is damaged	Refer to MB Service Manual
2	Charging slowly	USB cable breaks	Replace USB cable
		Charging head is broken	Replace charging head
		MB is damaged	Refer to MB Service Manual

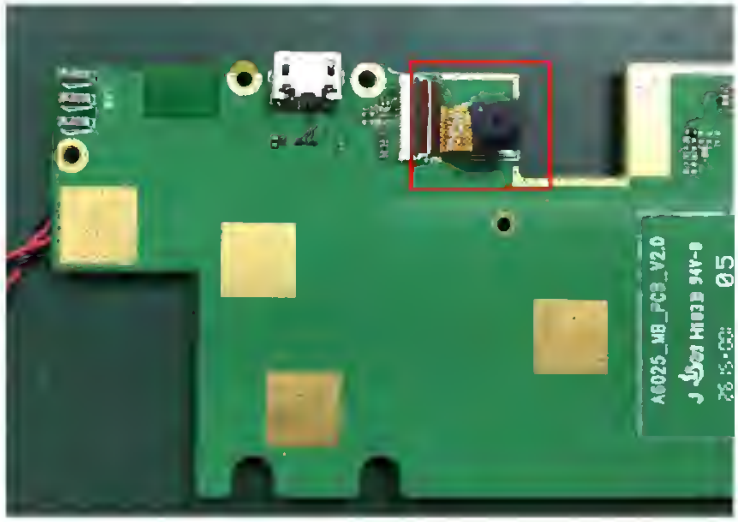
6. Rear camera issue

NO.	Issue Description	Cause	Solution
1	Camera not prepared, not working/No function	Rear camera FPC isn't well assembled	re-assemble camera FPC
		Rear camera is defective	Replace the camera
		MB is damaged	Repair MB
2	Cannot start the rear camera	Rear camera is defective	Replace the camera
3	Picture fault	FPC isn't well assembled or connection has defects	re-assemble camera FPC
		Rear camera has defects	Replace the camera
		MB is damaged	Repair MB



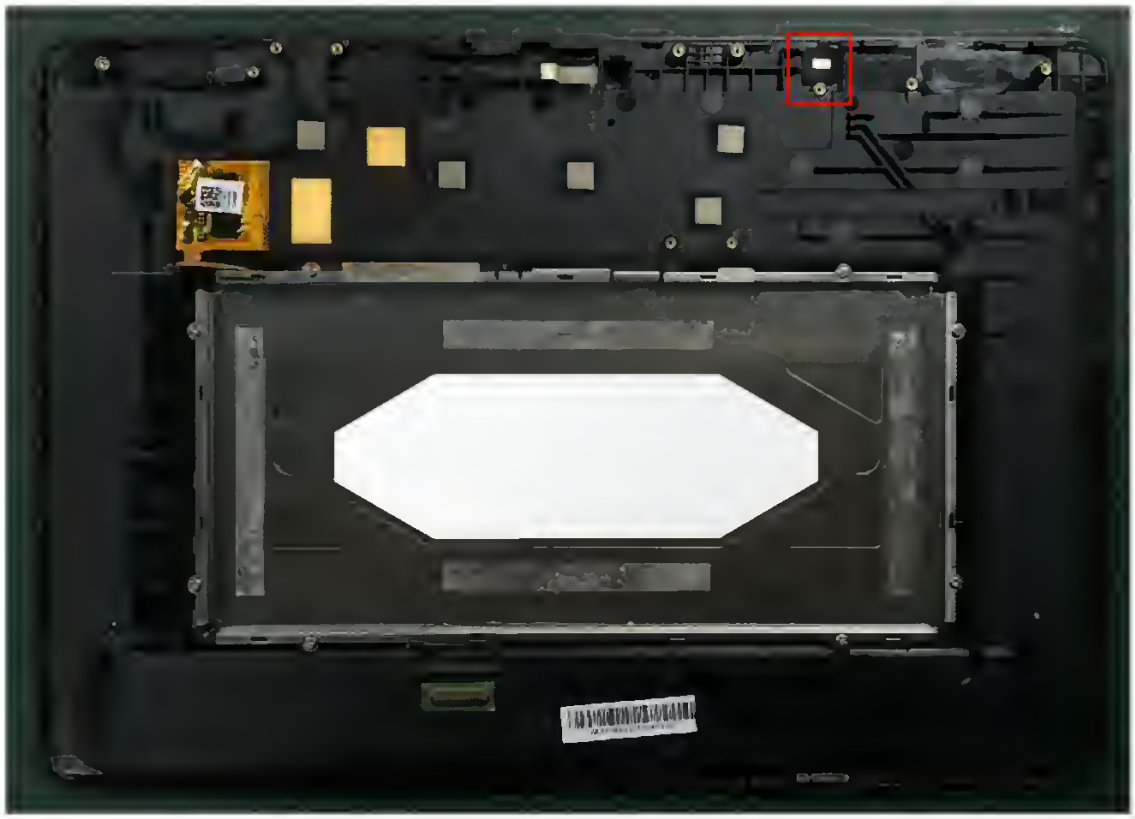
7. Front camera issue

NO.	Issue Description	Cause	Solution
1	Camera not prepared, not working/No function	Front camera FPC isn't well assembled	re-assemble
		Front camera is defective	Replace the camera
		MB is damaged	Repair MB
2	Cannot start the front camera	Front camera is defective	Replace the camera
3	Image fault	Front camera FPC isn't well assembled	re-assemble
		Front camera is defective	Replace the camera
		MB is damaged	Repair MB



8. WIFI antenna issue

NO.	Issue Description	Cause	Solution
1	no signal	Antenna appearance is defective	Replace antenna
		Antenna shrapnel badly connect to SB	Replace antenna cover



9. MP4 plays abnormally

NO.	Issue Description	Cause	Solution
1	Multi-media plays abnormally	MB is damaged	Repair MB
		SW issue	Upgrade SW
		Speaker box is defective	replace Speaker box
		Speaker box isn't well assembled	re-assemble

10. Earphone issue

NO.	Issue Description	Cause	Solution
1	No function	Earphone socket is defective	replace earphone socket
		MB is damaged	Repair MB
2	Earphone acoustic anomaly	Earphone socket is defective	replace earphone socket
		MB is damaged	Repair MB

11. Speaker box issue

NO.	Issue Description	Cause	Solution
1	Acoustic anomaly	Speaker box has defects	replace it
		MB/SB has defects	Repair MB/SB
2	No sound	Speaker box connects poorly	re-assemble it
		Speaker box has defects	replace speaker box
		MB/SB has defects	Repair MB/SB

12. Microphone issue

NO.	Issue Description	Cause	Solution
1	Acoustic problem	MIC has defects	replace
		Miss assembling MIC rubber case	Re-assemble
		MB has defects	Repair MB
2	MIC has no sound	MB has defects	Repair MB

13. Battery issue

NO.	Issue Description	Cause	Solution
1	Screen shows charging but fail	MB has defects	Repair MB
2	Fail to fully charge	Battery problem	replace
		MB problem	Repair MB
3	Fail to charge	MB has defects	Repair MB

型號/型号/Model：ZA6025 (1ICP4/82/74-2)
Rechargeable Lithium Ion Battery Pack
(電壓/电压) Rating: 3.6V
Minimum .5160mAh/19.66Wh
Typical :5340mAh/20.29Wh
CAUTION:Risk of explosion if battery is replaced by an incorrect type
Dispose of used batteries according to the instructions.Do not incinerate,
Made in China
(Cell Origin China)
S/N KT0020L001526001D54N00

Please use Acer ADS tool

CHAPTER 5

Serial Number Definition

Introduction of Acer FG SN

There are **22** characters in **Acer FG SN** which is a unique identifier of parts used in **Acer**. The following is its definition of every character of **Acer FG SN**.

Acer 22_Code_FG_SN: PPPPPPPPPPYWWSSSSSMMVV

#	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
22-Code	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**Y**	**W**	**W**	**S**	**S**	**S**	**S**	**S**	**M**	**M**	**V**	**V**
Definition	ACER FG PN										Year	Week		Sequence Number					MM		Version	

PPPPPPPPPP: **Acer FG PN** which is from the **BOM** by **PM**, **10** characters, without dots here.

There are **12** characters in **Acer FG PN** with the format of **2-5-3 code** including two dots. For example: **LX.G5808.039**. Remove dots to get **10** characters of **PPPPPPPPPP**. For example: **LXG5808039**.

YWW: **1** digit of year and **2** digits for week code.

Y: The last digit of year. For example: **9** if for 2009, **0** is for 2010, **1** for 2011, etc.

WW: (week code) is counted from **01** to **53**, and the definition of **week 01** follows **ISO 8601**. There are mutually equivalent descriptions of **week 01**:

- The week with the year's first **Thursday** in it (the formal **ISO** definition),
- The week with **4th** January in it,
- The first week with the majority (four or more) of its days in the starting year, and
- The week starting with the Monday in the period **29** December – **4** January.
- If first January is on a Monday, Tuesday, Wednesday or Thursday, it is in week **01**. If first January is on a Friday, Saturday or Sunday, it is in week **52** or **53** of the previous year. **28th** December is always in the last week of its year.

— Sunday 1 January 1995 is identified by the calendar date [1995-01-01] and week date [1994-W52-7]

— Tuesday 31 December 1996 is identified by the calendar date [1996-31-12] and week date [1997-W01-2]

SSSSS: **5** unique hexadecimal codes, by manufacturer/factory/product base, start form **00001** and reset every week.

- Hexadecimal numeral system uses **16** digits, they are **0~9**, **A**, **B**, **C**, **D**, **E** and **F**.
- Maintain one and only one counter to generate sequence numbers at a manufacture site in different factory (Factory1/Factory2) and different product (NB,/Tablet/SHH) that with a unique **MM** code.
- First digit of **SSSSS** cannot be **F**, so the maximum value of **SSSSS** is Hex (**EFFFF**) = **983039**.

(If the **SSSSS** is larger than Hex (**F4240**) = **999999**, you cannot transfer it to right

SNID because of overflow.)

Value	SSSSS for FG SN	DDDDDD for SNID
983039	EFFFF	983039
509	001FD	000509
12345	03039	012345

SSSSS = dec2hex (value) , DDDDDD = hex2dec (value) (detail refer to MS/excel)

hexadecimal codes	00001	00002	00003	00004	00005	00006	00007	00008	00009	0000A
Product Unit	1	2	3	4	5	6	7	8	9	10
hexadecimal codes	0000B	0000C	0000D	0000E	0000F	00010	00011	00012	00013	00014
Product Unit	11	12	13	14	15	16	17	18	19	20
hexadecimal codes	00015	00016	00017	00018	00019	0001A	0001B	0001C	0001D	0001E
Product Unit	21	22	23	24	25	26	27	28	29	30

* SSSSS: One counter to generate sequence number even different platform, product.....

MM:

>Manufacturer code, two digits defined by **Acer SIC**.

>It only apply by ODM manufacturer location not factory.

>Use alphanumeric characters, including **0~9** and **A~Z** only (**Excluding O, I, A, K and U**).

Special characters are not allowed here, like / @ # $ %.

>Maintain one and only one counter to generate sequence numbers at a manufacture site in different factory (Factory1/Factory2) and different product (NB,/Tablet/SHH) that with a unique **MM** code

VV:

>Engineering version code of hardware, two characters defined by **ODM/vendor**. Please use alphanumeric characters, including **0~9** and **A~Z** only (**Excluding O and I**). Special characters are not allowed here. If **ODM** do not need to use this **VV** code, keep it as "**00**".

This code does not be used to generate **SNID**. In other words, a **SNID** code does not contain **VV** data.

PSA30200129140O1FF0101 (sample)			
Definition Items	**Value**	**Source**	**Remark**
ACER FG PN	**PSA3020012**	**PS.A3020.012**	By PLM system
Year	**9**	**Year 2009**	Last digit of year
Week	**14**	**Week 14**	VWeek code, follow ISO8601
Serial Number	**001FF**	**00000 ~ EFFFF**	5 unique hexadecimal codes, **maximum capacity 983,039**
MM	**01**	**00 ~ 9Z**	Manufacturer code, two digits defined by Acer SIC for ODM/Vendor
Version	**01**	**00 ~ ZZ**	Engineering version code of hardware, two characters defined by ODM/vendor

Understanding Acer FG SNID

SNID Format

Acer 12_Code_SNID: YWWddddddMmm

#	1	2	3	4	5	6	7	8	9	10	11	12
11-code	**Y**	**W**	**W**	**d**	**d**	**d**	**d**	**d**	**d**	**M**	**m**	**m**
Definition	Year	Week	Sequence Number							Mmm		

YWW: **1** digit of year & **2** digits for week code, the same as **Acer FG SN**.

dddddd: **6** decimal numbers transferred from **5** hexadecimal numbers SSSSS of **Acer 22_Code_FG_SN**

Transfer formula for $S_1S_2S_3S_4S_5$:

The sequence number in decimal **dddddd** = $S_1*16^4 + S_2*16^3 + S_3*16^2 + S_4*16^1 + S_5$

Example: If **Acer FG SN** (SSSSS) = 001FD, **SNID** (dddddd) = 1*16*16+15*16+13 = **000509**.

Value	SSSSS for FG SN	DDDDDD for SNID
983039	EFFFF	983039
509	001FD	000509
12345	03039	012345

SSSSS = dec2hex (value) , DDDDDD = hex2dec (value) (detail refer to MS/excel)

Mmm:

>The Mmm transferred from Alphanumeric MM code of **Acer 22_Code_FG_SN**

Transfer formula for Base 36

Example: If Acer FG SN (MM) = 3E, SNID (Mmm) = 314

Decimal	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Base 36	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**
Decimal	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Base 36	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**Q**	**R**	**S**	**T**	**U**	**V**	**W**	**X**	**Y**	**Z**

The following table shows two methods to count sequence numbers. Suppose factory manufactures two models **A** and **B** at the same time.

Divide sequence numbers into two parts	**Random assigned depending on production sequence**
000001 to 491500 for model **A** 491501 to 983000 for model **B**	000001 for model **A** (1st FG) 000002 for model **B** (2nd FG) 000003 for model **A** (3rd FG) 000004 for model **A** (4th FG) 000005 for model **B** (5th FG) 000006 for model **A** (6th FG) 000007 for model **B** (7th FG) 000008 for model **B** (8th FG) etc.

Note 3.1.2A: The **SNID** codes are Alphanumeric and can not contain special symbol.

914000509314 (sample)			
Definition Items	**Value**	**Source**	**Remark**
Year	**9**	**Year 2009**	Last digit of year
Week	**14**	**Week 14**	Week code, follow ISO8601
Serial Number	**000509**	**000000 ~ 983039**	6 decimal numbers transferred from 5 hexadecimal numbers SSSSS of **Acer 22_Code_FG_SN**
Mmm	**314**	**000 ~ 990**	Manufacturer code, two digits defined by Acer SIC

Transfer formula for $S_1S_2S_3S_4S_5$:
The serial number in decimal **dddddd** = $S_1*16^4 + S_2*16^3 + S_3*16^2 + S_4*16^1 + S_5$
Example: If **Acer** FG SN (SSSSS) = 001FD, **SNID** (dddddd) = 1*162+15*16+13 = 000509

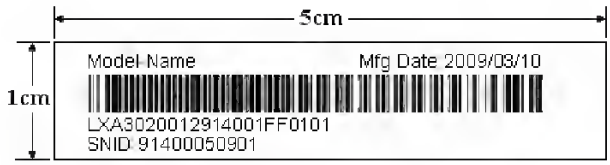
Acer FG Label and Its Barcode

ODM produces **Acer FG** labels with **Acer FG SN**, barcode and **SNID** printed on it first. When an **ODM** scans barcode and generates/collects **22**-character **Acer FG SN**, her **IT** system need to check all **Acer FG SN**, make sure they are correct, input them to dispatch and **KC SF** data file, and finally upload them to **Acer FTP** servers. **Acer FG SN** barcode printed on label follows **CODE-128** standard. Please refer to the following web sites. The resolution of barcode is **200 DPI** (**8 dot/mm**) or higher. Please take a look at the following figures to reference the locations of **Acer FG** label and itself.

- http://www.adams1.com/pub/russadam/128code.html
- http://www.barcode-college.com.tw/barcode.htm

Note 4.1: **Acer** label size is **1 cm * 5 cm**. This label size is for reference only. **ODM** can adjust a little the label size to meet physical requirements. **ODM** also can discuss with related **Acer PM** to define the best location to stick **Acer FG** label. **Acer FG** label can also be combined with **FG** rating label. If **ODM** has the problems about labels stuck on a **FG**, please contact with related **Acer PM**.

Note 4.2: Every **Acer FG SN** in databases is the same as the characters and the meaning of barcode printed on its own label.



Introduction of Acer KC PN and Acer KC SN

If the **KC** (**Acer** buy-and-sell component) is purchased from **Acer**, it is supposed to have **Acer KC PN** and **Acer KC SN** already. The **Acer PM** or **PIC** in procurement team will apply **Acer KC PN** for them. **Acer KC PN** is a **2-5-3 code** just like **Acer FG PN**. **ODM PIC** should scan those barcodes of **Acer KC SN** on labels, collect the data and upload them to **Acer SIC FTP** server.

There are also **22** characters in an **Acer KC SN**. The format of **Acer KC SN** is almost the same as **Acer FG SN**. **Acer KC SN** does not have its related **SNID**. The following is its definition of every character.

Acer 22_Code_KC_SN: **PPPPPPPPPPYWWSSSSSMMVV**

#	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
22-Code	P	P	P	P	P	P	P	P	P	P	Y	W	W	S	S	S	S	S	M	M	V	V
Definition	ACER KC PN										Year	Week		Sequence Number					MM		Version	

PPPPPPPPPP: **Acer KC PN** (**2-5-3 code**) which is from the **BOM** by **Acer PM**, **10** characters, without dots here.

YWW: The same as **Acer 22_Code_FG_SN**.

SSSSS: The same as **Acer 22_Code_FG_SN**.

MM: Manufacturer code of original supplier or **ODM** herself, two digits defined by **Acer**.

VV: Engineering version code, two characters defined by **ODM/vendor** or original

supplier.

Note 6.0.1: Every **KC SN** in databases is the same characters as shown on its own label including it barcode.

Note 6.0.2: Every **ODM KC PN** can be found in Acer **SPL** database. (Please contact with the **Acer PIC** in **CSD**.)

Note 6.0.3: **Acer KC PN** is more important than **Acer KC SN** for repair centers.

LK140050109140O1FF6601 (sample)			
Definition Items	Value	Source	Remark
ACER KC PN	LK14005010	LK.14005.010	By PLM system
Year	9	Year 2009	Last digit of year
Week	14	Week 14	Week code, follow ISO8601
Serial Number	001FF	00000 ~ EFFFF	5 unique hexadecimal codes, **maximum capacity 983,039**
MM	66	00 ~ 9Z	Manufacturer code, two digits defined by Acer SIC for ODM/Vendor
Version	01	00 ~ ZZ	Engineering version code of hardware, two characters defined by ODM/vendor

Transfer formula for $S_1S_2S_3S_4S_5$:
The serial number in decimal **dddddd** = $S_1*16^4 + S_2*16^3 + S_3*16^2 + S_4*16^1 + S_5$
Example: If **Acer** FG SN (SSSSS) = 001FD, **SNID** (dddddd) = 1*162+15*16+13 = 000509

CHAPTER 6

RRU (Field Replaceable Unit) List

This chapter provides the FRU (Field Replaceable Unit) listing in global configurations for the Longines TAB. Refer to this chapter whenever ordering for parts to repair or for RMA (Return Merchandise Authorization).

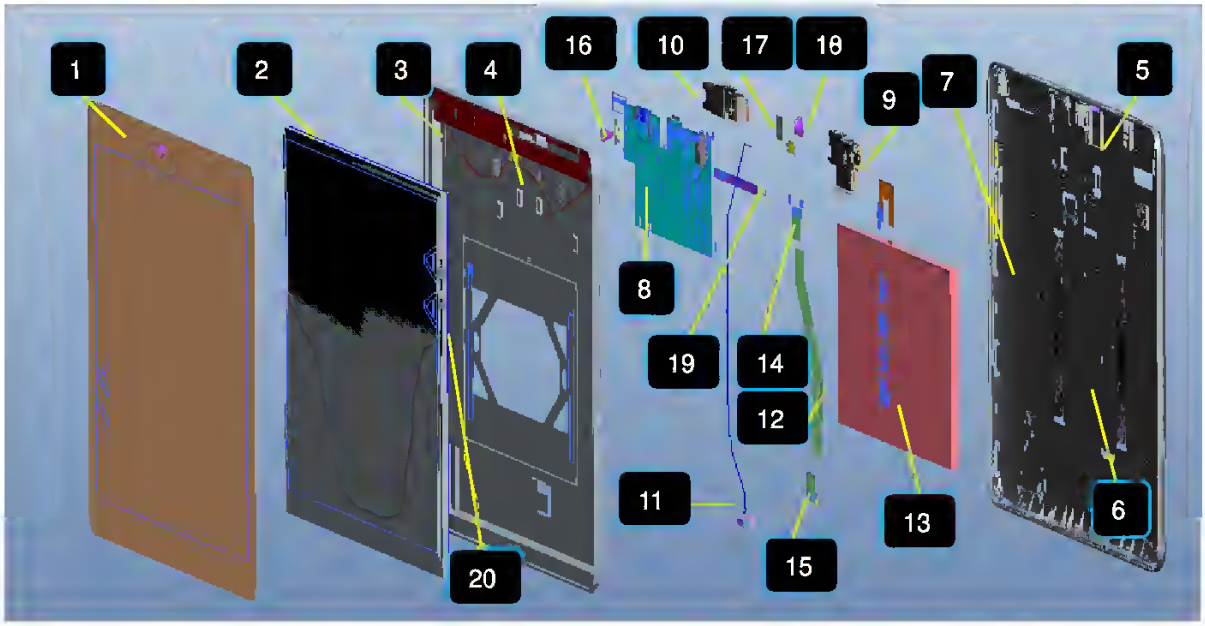
NOTE:

When ordering FRU parts, check the most up-to-date information available on the regional web or channel. Part number changes will not be noted on the printed Service Guide. For Acer Authorized Service Providers, the Acer office may have a different part number code from those given in the FRU list of this printed Service Guide. Users must use the local FRU list provided by the regional Acer office to order FRU parts for repair and service of customer machines.

NOTE:

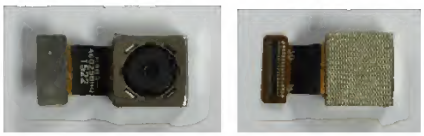
To scrap or to return the defective parts, users should follow local government ordinances or regulations on proper disposal, or follow the rules set by the regional Acer office on how to return the defective parts.

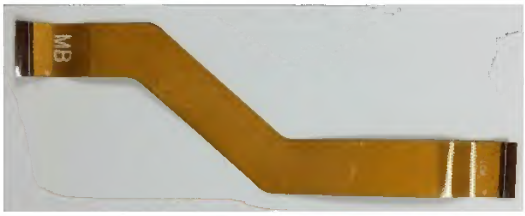
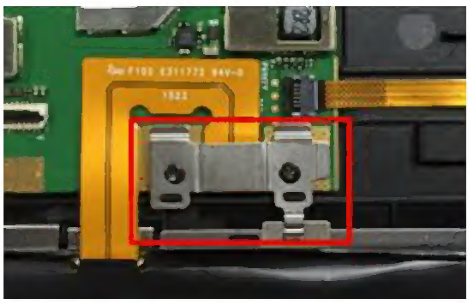
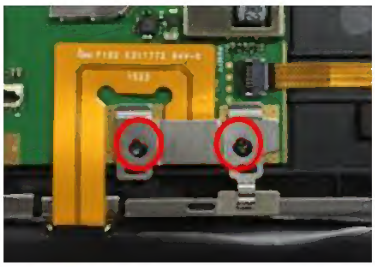
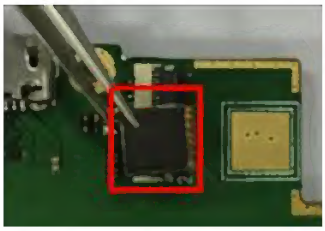
Exploded Diagram and Description

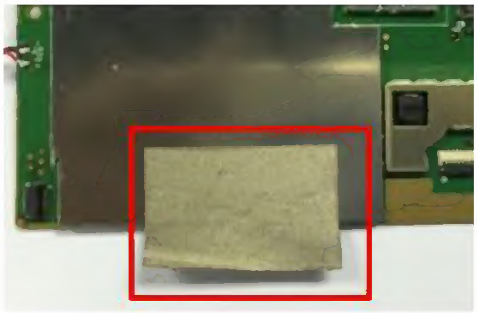
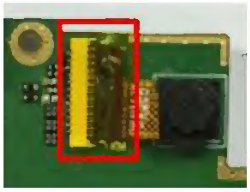
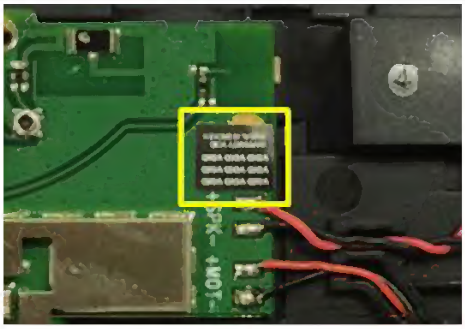
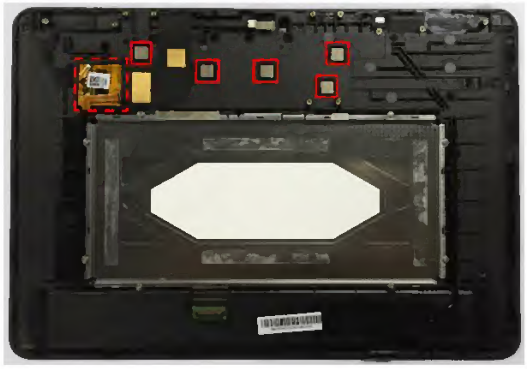


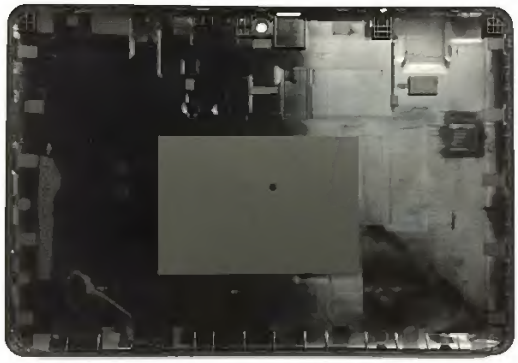
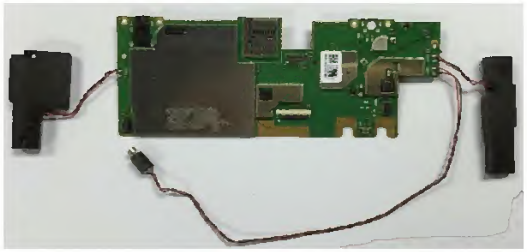
No.	HQ PN	Description	Qty
1	HQ21711127000	Touch panel	1
2	HQ20100775000	LCM	1
3	HQ20700916000	Front cover	1
4	HQ21900182000	MB landing conductive fabric	6
5	HQ20711082000	Rear cover (including side key button)	1
6	HQ22260426000	Rear cover cooling membrane	1
7	HQ21211272000	Rear camera lens	1
8	HQ31204096000	Main board	1
9	HQ20330127000	Speaker Box 1	1
10	HQ20330128000	Speaker Box 2	1
11	HQ20400069000	Motor	1
12	HQ22010301000	LINK FPC	1
13	HQ60331262000	Battery	1
14	HQ20900084000	Lock battery connector steel piece	1
15	HQ22230838000	LCM connector mylar	1
16	HQ20200996000	Front camera	1
17	HQ22200498000	Front camera block-up sponge	1
18	HQ20201028000	Rear camera	1
19	HQ22001077000	Side key FPC	1
20	HQ21400435000	MIC rubber cap	1

FRU List

Category	HQ Part NO.	Description
Battery		
	HQ60331262000 (Acer PN: KT.0020L.001)	5340mah_SP318173SE_acer
USB Cable		
/	HQ60320586000	CA33_Micro-5Pin 2000mA_100cm_ACER
Front Camera		
	HQ20200996000 (Acer PN: NC.21411.036)	5*5*2.95_30W
Rear Camera		
	HQ20201028000 (Acer PN: NC.21411.04A)	8.5*8.5*4.66mm_500W
MIC Rubber Case		
	HQ21400435000	Black rubber
Side Key FPC		
	HQ22001077000	

LINK FPC		
	HQ22010301000	
Steel Disc Used to Lock Battery Connector		
	HQ20900084000	Silver
Screw		
	HQ22110009000	Used to Lock MB & Speaker Box M1.4*3.5_black
	HQ22110033000	Used to lock battery connector steel disc M1.4*2.0
Front Camera Block Up Foam		
	HQ22200498000	4.6*4.6*0.7_square_black

Conductive Fabric for MB Shielding Cover		
	HQ22260425000	70*47*0.08_silver
Mylar		
	HQ22230838000	For LCM connector 15.2*7*0.06_yellow
	HQ22230839000	For front camera connector 10*5.2*0.06_yellow
Break Seal Label		
	HQ60401199000	6*5mm
Defined Module		
LCD Module		
	HQ31601537000 (Acer PN:6M.LB6N8.001)	Touch panel LCM Conductive fabric for MB landing

Rear Cover Module		
	HQ31601538000	Black rear cover Rear camera lens
MB Module		
	HQ31601539000 (Acer PN: NB.LB611.001)	MB Speaker box Motor Waterproof label
MB Soldering Spare Parts List	Speaker box 1 PN(Right): HQ20330127000 Speaker box 2 PN(Left): HQ20330128000 Motor PN: HQ20400069000	